

attack control. Emphasize systems management, target PID, PGM employment, threat countertactics and tactical communication.

Performance Standards

Compliance with JCAS TTPs.
Compliance with TAC abort parameters.
Valid delivery IAW USMC TACSOP.
Execution appropriate threat countertactics.
TOT +/- 15 secs.

Prerequisite. CAS-301.

Ordnance. 1 GBU-31/32/38, 2 GBU-10/12/16, 40 Chaff/20 Flare for ALE-39 equipped aircraft/60 Chaff/60 Flare for ALE-47 equipped aircraft.

Range Requirements. RSTD, TGT, SST, EW, JCAS, TGT-DISP, TGT-MOVE, JDAM.

External Syllabus Support. JTAC or FAC(A).

CAS-303

1.3 2 FA-18 A/C/D A (NS)

Goal. Conduct urban CAS.

Requirement. Conduct three CAS attacks in an urban environment. Emphasize systems management, target PID, and weapons employment. This sortie can be completed using an actual urban area with simulated ordnance if an urban target complex is not available.

Performance Standards

Compliance with JCAS TTPs.
Compliance with TAC abort parameters.
Valid delivery IAW USMC TACSOP.
Execution appropriate threat countertactics.
TOT +/- 15 secs.

Prerequisite. CAS-302.

Ordnance. 1 GBU-31/32/38, 2 GBU-10/12/16, 40 Chaff/20 Flare for ALE-39 equipped aircraft/60 Chaff/60 Flare for ALE-47 equipped aircraft.

Range Requirements. RSTD, TGT, SST, EW, JCAS, URBN WPNS, TGT-DISP, TGT-MOVE, EXP, JDAM.

External Syllabus Support. JTAC or FAC(A).

3. Armed Reconnaissance (AR)

a. Purpose. To develop proficiency in conducting Armed Reconnaissance missions.

b. General. Emphasize mission planning, mutual support, target acquisition /recognition /identification, target area tactics and information flow through the C³ system. The commanding officer may authorize inert

ordnance in lieu of live ordnance when necessary. Ensure required ordnance not available (TRK-598) code is logged. Aircraft should be configured with operable VTR/CVRS, ALR-67, CATM-9, TPOD, binoculars, LDT, KY-58, DCS/VMF, MIDS, chaff, and flares when possible.

c. Ground/Academic Training. See MAWTS-1 Course Catalog.

d. Flight and Simulator Event Training. (3 Events/3.9 Hours).

AR-310 1.3 R 2 FA-18A/C/D A (NS)

Goal. Conduct day med/high altitude AR utilizing GP ordnance. Emphasize mission planning, target precedence, search pattern, attack parameters, delivery modes, and information flow through the C³ system.

Requirement. Conduct day med/high altitude GP AR to locate, plot, and destroy targets of opportunity. 1 GP ordnance delivery profile and 2 strafe profiles required for completion.

Performance Standards

Able to conduct visual reconnaissance of assigned area and detect targets.

Performs target attacks appropriate for scenario.

Minimizes threat exposure and performs appropriate threat countertactics.

Performs valid weapons deliveries IAW USMC TACSOP.

Prerequisite. 200 Level Complete.

Ordnance. 4 Mk-82/83/84, 250 rnds of 20mm, 40 Chaff/20 Flare for ALE-39 equipped aircraft/60 Chaff/60 Flare for ALE-47 equipped aircraft.

Range Requirements. RSTD, TGT, HE, SST, TGT-DISP, TGT-MOVE, EW, EXP, LSR.

AR-311 1.3 R 2 FA-18A/C/D A

Goal. Conduct day med/high altitude PGM AR. Emphasize mission planning, target precedence, search pattern, attack parameters, delivery modes, designation techniques, and information flow through the C³ system.

Requirement. Conduct day med/high altitude PGM AR to locate and destroy targets of opportunity. 1 LMAV delivery profile, 1 LGB delivery profile, and 2 strafe profiles required for completion.

Performance Standards

Able to conduct visual and sensor reconnaissance of assigned area and detect targets.

Employs appropriate weapon and tactics for threat and target type.

Minimizes threat exposure and performs appropriate threat countertactics.

Performs valid weapons deliveries IAW USMC TACSOP.

Prerequisite. AR-310.

Ordnance. 1 Laser MAV (live or captive), 1 GBU-10/12/16, 250 rnds of 20mm, 40 Chaff/20 Flare for ALE-39 equipped aircraft/60 Chaff/60 Flare for ALE-47 equipped aircraft.

Range Requirements. RSTD, TGT, HE, SST, EW, LSR, TGT-DISP, TGT-MOVE, EXP.

AR-312

1.3 R 2/4 FA-18A/C/D A NS

Goal. Conduct night PGM AR. Emphasize mission planning, target precedence, search pattern, sensor employment, attack parameters, delivery modes, designation techniques, and information flow through the C³ system.

Requirement. Conduct night med/high altitude PGM AR to locate and destroy targets of opportunity. 1 LMAV delivery profile, 1 LGB delivery profile, and 2 strafe profiles required for completion.

Performance Standards

Able to conduct visual/sensor reconnaissance of assigned area and detect targets.

Employs appropriate weapon and tactics for threat and target type.

Minimizes threat exposure and performs appropriate threat countertactics.

Performs valid weapons deliveries IAW USMC TACSOP.

Coordination of one element of AR required for completion.

Prerequisite. AR-311.

Ordnance. 1 Laser MAV (live or captive), 1 GBU-10/12/16, 250 rnds of 20mm, 40 Chaff/20 Flare for ALE-39 equipped aircraft/60 Chaff/60 Flare for ALE-47 equipped aircraft.

Range Requirements. RSTD, TGT, HE, SST, EW, LSR, TGT-DISP, TGT-MOVE, EXP.

4. Strike Coordination and Reconnaissance (SCAR)

a. Purpose. To develop proficiency in conducting Strike Coordination and Reconnaissance missions.

b. General. Emphasize mission planning, mutual support, target acquisition/recognition/identification, target marking, strike asset coordination and information flow through the C³ system. The commanding officer may authorize inert ordnance in lieu of live ordnance when necessary. Ensure required ordnance not available (TRK-598) code is logged. Operable VTR/CVRS, ALR-67, CATM-9, TPOD, binoculars, KY-58, DCS/VMF, MIDS, chaff, and flares when possible.

c. Ground/Academic Training. See MAWTS-1 Course Catalog.

d. Flight and Simulator Event Training. (2 Events, 2.6 Hours).

SCAR-320

1.3 R 2 FA-18A/C/D A

Goal. Conduct day SCAR. Emphasize locating targets in accordance with a target precedence list, notifying AR assets

of target locations and current threat, and proper information flow through the C³ system.

Requirement. Coordination of one element of AR required for completion.

Performance Standards

Effectively locates and passes target locations to AR assets.
Prioritizes targets in accordance with target precedence list.
Effectively coordinate(s) target attacks.
Effectively passes target and threat information to AR assets and C³.

Prerequisite. AR-312.

Ordinance. Two pods of 2.75" / 5.0" rockets, 2 Mk-82/83/84, 250 rnds of 20mm, 40 Chaff/20 Flare for ALE-39 equipped aircraft/60 Chaff/60 Flare for ALE-47 equipped aircraft.

Range Requirements. RSTD, HE, EW, SST, TGT-DISP, TGT-MOVE, LSR.

External Syllabus Support. 1 section AR assets.

SCAR-321

1.3

R 2 FA-18A/C/D A NS

Goal. Conduct night SCAR. Emphasize locating targets in accordance with a target precedence list, notifying AR assets of target locations and current threat, and proper information flow through the C³ system.

Requirement. Coordination of one element of AR required for completion.

Performance Standards

Effectively locates and passes target locations to AR assets.
Prioritizes targets in accordance with target precedence list.
Effectively coordinate(s) target attacks.
Effectively passes target and threat information to AR assets and C³.

Prerequisite. SCAR-320.

Ordinance. Two pods of 2.75" / 5.0" rockets, 2 Mk-82/83/84, 250 rnds of 20mm, 40 Chaff/20 Flare for ALE-39 equipped aircraft/60 Chaff/60 Flare for ALE-47 equipped aircraft.

Range Requirements. RSTD, HE, EW, SST, TGT-DISP, TGT-MOVE, LSR.

External Syllabus Support. 1 section AR assets.

5. Anti-Air Warfare (AAW)

a. Purpose. To utilize core skill in employing the FA-18 in Anti-Air Warfare missions. Emphasize mission planning, mutual support, knowledge of air-to-air weapons and tactics, sensor usage, standardized communication, weapons employment, AIC integration, short range radar mechanics, and targeting.

b. General

(1) AIC, data link and TACTS Range should be utilized to the maximum extent possible. If co-located with AIC controllers, a face-to-face brief and debrief should be conducted for all engagements.

(2) To gain and maintain proficiency in AAW missions.

c. Crew Requirements. None.

d. Ground/Academic Training. Refer to MAWTS-1 Course Catalog.

e. Flight and Simulator Event Training. (9 Events, 11.1 Hours).

SAAW-330 1.0 R WTT/OFT S

Goal. Conduct an OCA (Sweep) mission against an unknown number of adversaries with SAR-1 and IR-3 missiles. Emphasize section intercept procedures, targeting and sorting, valid weapons employment, and standardized communication.

Requirement. With a minimum of 40 NM separation, the fighter commences the intercept at medium altitude. Adversaries commence the intercept at any altitude and airspeed, maneuvering. Adversaries present a level 3 bandit simulation IAW the USMC FA-18 TACSOP. Fighter weapons control status is tight with PHID criteria set by flight lead according to theater of operation. Four runs required for completion.

Performance Standards
Executes proper radar mechanics.
Targets as directed.
Recognizes threat tactics.
Takes valid shots.
Timeline awareness.

Prerequisite. AA-260-270.

AAW-331 1.3 R 2 FA-18A/C/D vs. 2+ DISS ADV A (NS)

Goal. Conduct an OCA (Screen/Close Escort) mission against an unknown number of adversaries (Dissimilar Adversaries (DISS ADV)) with SAR-1 and/or IR-3 missiles. Emphasize section intercept procedures, maintaining proper formation, targeting and sorting, VID weapons employment, and standardized communications.

Requirement. With a minimum of 40 NM separation, the fighters commence the OCA (Screen/Close Escort) intercept at medium altitude. The adversaries commence the intercept at any altitude and airspeed, maneuvering. Adversaries present a level 3 or 4 bandit simulation IAW the USMC FA-18 TACSOP. Fighter weapons control status is tight with PHID criteria that prevent weapons employment until a VID on at least 1 run. Three intercepts required for completion.

Performance Standards
Maintains mutual support.
Executes proper radar mechanics.
Targets as directed.

Recognizes threat tactics.
Takes valid shots.
Timeline awareness.
Tactical decision making IAW mission objectives.

Prerequisite. SAAW-330.

Ordnance. CATM-9, 40 Chaff/20 Flare for ALE-39 equipped aircraft/60 Chaff/60 Flare for ALE-47 equipped aircraft, and CATM-7/120.

Range Requirements. AA, EXP, MACH 1+, TACTS.

External Syllabus Support. Two or more adversaries.

AAW-332

1.3 R 4 FA-18A/C/D vs. 2+ DISS ADV A

Goal. Conduct a division OCA (Sweep/PSS) mission against an unknown number of adversaries with SAR-1 missiles. Emphasize division intercept procedures, maintaining proper formation, targeting and sorting, valid weapons employment, and standardized communications.

Requirement. Three runs required for completion. Adversaries present a level 3 or 4 bandit simulation IAW the USMC FA-18 TACSOP. Fighter weapons control status is tight with PHID criteria set by flight lead according to theater of operation.

Performance Standards
Maintains mutual support.
Executes proper radar mechanics.
Targets as directed.
Recognizes threat tactics.
Takes valid shots.
Timeline awareness.
Tactical decision making IAW mission objectives.

Prerequisite. AAW-331.

Ordnance. CATM-9, 40 Chaff/20 Flare for ALE-39 equipped aircraft/60 Chaff/60 Flare for ALE-47 equipped aircraft, and CATM-7/120.

Range Requirements. AA, EXP, MACH 1+, TACTS.

External Syllabus Support. Two or more dissimilar adversaries, TACTS range.

AAW 333

1.3 R 4 FA-18A/C vs. 2+ DISS ADV A NS

Goal. Conduct a night division OCA (Sweep/PSS) mission against an unknown number of bogies (Dissimilar Adversaries) with SAR-2 or AR-1 missiles. Emphasize division intercept procedures, maintaining proper formation, targeting and sorting, valid weapons employment, and standardized communications.

Requirement. Three runs required for completion. Adversaries present a level 3 or 4 bandit simulation IAW the USMC FA-18

TACSOP. Fighter weapons control status is tight with PHID criteria set by flight lead according to theater of operation.

Performance Standards
Maintains mutual support.
Executes proper radar mechanics.
Targets as directed.
Recognizes threat tactics.
Takes valid shots.
Timeline awareness.
Tactical decision making IAW mission objectives.

Prerequisite. AA-332.

Ordnance. CATM-9, 40 Chaff/20 Flare for ALE-39 equipped aircraft/60 Chaff/60 Flare for ALE-47 equipped aircraft, and CATM-7/120.

Range Requirements. AA, EXP, MACH 1+, TACTS.

External Syllabus Support. Two or more dissimilar adversaries, TACTS range adversaries.

AAW-334

1.3 R 2+ FA-18A/C vs. 2+ Adversaries A (NS)

Goal. Conduct section or division attacks against an unknown number of adversaries with SAR-1 and/or IR-3 missiles in an EA environment.

Requirement. With a minimum of 40 NM separation, the fighters commence the intercept at medium altitude. The adversaries commence the intercept at any altitude and airspeed, maneuvering. Adversaries should use self-protect jamming techniques or be screened by a stand-off jammer. Adversaries present a level 3 or 4 bandit simulation IAW the USMC FA-18 TACSOP. Fighter weapons control status is tight with PHID criteria set by flight lead according to theater of operation. Three intercepts required for completion.

Performance Standards
Executes proper radar mechanics in a EA environment.
Recognizes threat tactics and different jamming techniques.
Maintains mutual support.
Executes proper radar mechanics.
Targets as directed.
Recognizes threat tactics.
Takes valid shots.
Timeline awareness.
Tactical decision making IAW mission objectives.

Prerequisite. AA-260-270.

Ordnance. CATM-9, 40 Chaff/20 Flare for ALE-39 equipped aircraft/60 Chaff/60 Flare for ALE-47 equipped aircraft, and CATM-7/120.

Range Requirements. AA, EXP, MACH 1+, TACTS.

External Syllabus Support. Two adversaries with self-protect jamming equipment or two adversaries and one stand-off jammer.

SAAW-335

1.0

R WTT/OFT S

Goal. Conduct a DCA (Point Defense) mission against an unknown number of adversaries with SAR-1 and/or IR-3 missiles. Emphasize commit criteria, reset criteria, desired engagement zone, targeting/sorting, valid weapons employment, and standardized communications.

Requirement. One defined vulnerability period required for completion. Fighter weapons control status is tight with PHID criteria set by flight lead according to theater of operation. Adversaries present a level 3 or 4 bandit simulation IAW the USMC FA-18 TACSOP. On one run, PID criteria will not be satisfied until after planned weapons employment range.

Performance Standards

Executes proper radar mechanics.

Targets as directed.

Recognizes threat tactics.

Takes valid shots.

Timeline awareness.

Tactical decision making IAW mission objectives.

Prerequisite. AA-260-270.

External Syllabus Support. Dissimilar Adversaries.

AAW-336

1.3

R 2 FA-18A/C/D vs. 2+ Adversaries A

Goal. Conduct a day section DCA/Area Defense mission against an unknown number of adversaries with SAR-1 missiles. Emphasize commit criteria, reset criteria, desired engagement zone, targeting/sorting, valid weapons employment, and standardized communications.

Requirement. One defined vulnerability period required for completion. Adversaries present a level 3 or 4 bandit simulation IAW the USMC FA-18 TACSOP. Fighter weapons control status is tight with PHID criteria set by flight lead according to theater of operation. On one run, PHID criteria will not be satisfied until after planned weapons employment range.

Performance Standards

Maintains mutual support.

Executes proper radar mechanics.

Targets as directed.

Recognizes threat tactics.

Takes valid shots.

Timeline awareness.

Tactical decision making IAW mission objectives.

Prerequisite. SAAW-335.

Ordnance. CATM-9, 40 Chaff/20 Flare for ALE-39 equipped aircraft/60 Chaff/60 Flare for ALE-47 equipped aircraft, and CATM-7/120.

Range Requirements. AA, EXP, MACH 1+, TACTS.

External Syllabus Support. Two or more adversaries, TACTS range.

AAW-337

1.3 R 4 FA-18A/C/D vs. 2+ Adversaries A

Goal. Conduct a day division DCA/Area Defense against an unknown number of adversaries with SAR-2 or AR-1 missiles. Emphasize commit criteria, reset criteria, desired engagement zone, targeting/sorting, valid weapons employment, and standardized communications.

Requirement. One defined vulnerability period required for completion. Adversaries present a level 3 or 4 bandit simulation IAW the USMC FA-18 TACSOP. Fighter weapons control status is tight with PHID criteria set by flight lead according to theater of operation. On one run, PHID criteria will not be satisfied until after planned weapons employment range.

Performance Standards

Maintains mutual support.
Executes proper radar mechanics.
Targets as directed.
Recognizes threat tactics.
Takes valid shots.
Timeline awareness.
Tactical decision making IAW mission objectives.

Prerequisite. AAW-336.

Ordinance. CATM-9, 40 Chaff/20 Flare for ALE-39 equipped aircraft/60 Chaff/60 Flare for ALE-47 equipped aircraft, and CATM-7/120.

Range Requirements. AA, EXP, MACH 1+, TACTS.

External Syllabus Support. Two or more adversaries, TACTS range.

AAW-338

1.3 R 4 FA-18A/C vs. 2+ Adversaries A NS

Goal. Conduct a night division DCA/Area Defense against an unknown number of adversaries with SAR-2 or AR-1 missiles. Emphasize commit criteria, reset criteria, desired engagement zone, targeting/sorting, valid weapons employment, and standardized communications.

Requirement. One defined vulnerability period required for completion. Adversaries present a level 3 or 4 bandit simulation IAW the USMC FA-18 TACSOP. Fighter weapons control status is tight with PHID criteria set by flight lead according to theater of operation. On one run, PHID criteria will not be satisfied until after planned weapons employment range.

Performance Standards

Maintains mutual support.
Executes proper radar mechanics.
Targets as directed.
Recognizes threat tactics.

Takes valid shots.
Timeline awareness.
Tactical decision making IAW mission objectives.

Prerequisite. AAW-337.

Ordnance. CATM-9, 40 Chaff/20 Flare for ALE-39 equipped aircraft/60 Chaff/60 Flare for ALE-47 equipped aircraft, and CATM-7/120.

Range Requirements. AA, EXP, MACH 1+, TACTS.

External Syllabus Support. Two or more adversaries, TACTS range.

6. Suppression of Enemy Air Defenses (SEAD)

- a. Purpose. To develop proficiency in SEAD weapons and tactics.
- b. General. Emphasize SEAD weapon capabilities and limitations, cockpit management, designation techniques, delivery modes and attack parameters. Aircraft should be configured with operable VTR/CVRS, ALQ-126B, ALR-67, TPOD, CATM-9, KY-58, MIDS, chaff, and flares.
- c. Ground/Academic Training. Refer to MAWTS-1 Course Catalog.
- d. Flight and Simulator Event Training. (3 Events/2.8 Hours).

SSEAD-340 0.5 R WTT/OFT S

Goal. Practice employment of the Joint Standoff Weapon (JSOW). Emphasize weapon capabilities and limitations, cockpit displays, and employment techniques.

Requirement. Plan on TAMPS/JMPS and conduct multiple ordnance deliveries. Minimum of three deliveries required for completion.

Performance Standards
Effectively mission plans for JSOW.
Delivers JSOW IAW TACSOP tactics with TOT +/- 15 secs.

Prerequisite. MAWTS-1 JSOW lecture.

SSEAD-341 1.0 R WTT/OFT S

Goal. Practice employment of the AGM-88 HARM. Emphasize weapon capabilities and limitations, cockpit displays, and employment techniques.

Requirement. Plan mission on TAMPS or JMPS. Employ the AGM-88 against a ground based emitter. Three PB shots, three TOO shots, a HARM designation, and a Manually Modified Entry (MME) required for completion.

Performance Standards
Effectively mission plans for HARM.
Delivers PB HARM IAW TACSOP tactics with TOT +/- 15 secs.
Effectively employs HARM in TOO mode.

Prerequisite. MAWTS-1 HARM Modes of Operation and Displays lecture.

SEAD-342 1.3 R 2 FA-18A/C/D A (NS)

Goal. Practice airborne employment of the AGM-88 HARM. Emphasize mission planning, weapon capabilities and limitations, cockpit displays and employment techniques.

Requirement. Plan mission on TAMPS or JMPS. Conduct two PB HARM shots with TOTs utilizing USMC FA-18 TACSOP tactics. Conduct two TOO HARM shots utilizing USMC FA-18 TACSOP tactics.

Performance Standards

Able to effectively mission plan for HARM.
Able to deliver PB HARM IAW TACSOP tactics with TOT +/- 15 secs.
Able to effectively employ HARM in TOO mode.

Prerequisite. SSEAD-341.

Ordnance. 1 CATM-88, TACTS pod, 40 Chaff/20 Flare for ALE-39 equipped aircraft/60 Chaff/60 Flare for ALE-47 equipped aircraft.

Range Requirements. MOA, TACTS, Hi Fi EW, ARM.

7. Air Interdiction (AI)

a. Purpose. To develop proficiency in conducting AI missions.

b. General. Emphasize mission planning, tactical decision making, mutual support and target acquisition/destruction. Ordnance types may be substituted based on the mission, threat and to vary tactics and training requirements. The commanding officer may authorize inert ordnance in lieu of live ordnance when necessary. Ensure required ordnance not available (TRK-598) code is logged. Aircraft should be configured with operable VTR/CVRS, ALQ-126B, ALR-67, CATM-9, TPOD, KY-58, CIT, MIDS, chaff, and flares when possible.

c. Ground/Academic Training. Refer to MAWTS-1 Course Catalog.

d. Flight and Simulator Event Training. (5 Events/6.2 Hours).

SAI-350 1.0 R WTT/OFT S

Goal. Conduct a section AI mission against a target with integrated air defenses. Emphasize air-to-surface and air-to-air mission planning, tactical decision making, and target acquisition.

Requirement. Attack and destroy a defended surface target. Plan a strike route using a mission planning system. Weaponize a specific target. Execute ingress, ordnance delivery and egress tactics consistent with the threat.

Performance Standards

Recognizes and reacts appropriately to threats.
Adheres to planned air-to-air timeline and tactics.

Delivers weapons on planned DMPI.
Adheres to TACSOP valid delivery parameters.
Takes valid shots.

Prerequisite. 200 level complete and AAW-338 (A/C only).

Ordnance. 1 GBU-10/12/16, 1 JDAM, 1 radar missile, 2 AIM-9.

AI-351

1.3

R 2 FA-18A/C/D vs. 2 Adversaries A

Goal. Conduct a section, day, low altitude, GP ordnance AI mission against a target with integrated air defenses. Emphasize air-to-surface and air-to-air mission planning, tactical decision making, mutual support, target acquisition and target destruction.

Requirement. Attack and destroy a surface target. Plan a strike route using a mission planning system. Weaponeer a specific target. Execute ingress, ordnance delivery and egress tactics consistent with the threat.

Performance Standards

Recognizes and reacts appropriately to threats.
Adheres to planned air-to-air timeline and tactics.
Delivers weapons on planned DMPI.
Adheres to TACSOP valid delivery parameters.
Takes valid shots.

Prerequisite. SAI-350.

Ordnance. 4 Mk-82/83/84, CATM-9, CATM-120, 40 Chaff/20 Flare for ALE-39 equipped aircraft/60 Chaff/60 Flare for ALE-47 equipped aircraft.

Range Requirements. TGT, AA, EW, SST, TACTS, TGT-DISP, LSR.

External Syllabus Support. Two adversaries and one tanker (if AAR required).

AI-352

1.3

R 4 FA-18A/C/D vs. 2 Adversaries A

Goal. Conduct a division, day, high altitude, PGM AI mission against a target with integrated air defenses. Emphasize air-to-surface and air-to-air mission planning, tactical decision making, mutual support, target acquisition and target destruction.

Requirement. Attack and destroy a surface target. Plan a strike route using a mission planning system. Weaponeer a specific target. Execute ingress, ordnance delivery and egress tactics consistent with the threat.

Performance Standards

Recognizes and reacts appropriately to threats.
Adheres to planned air-to-air timeline and tactics.
Delivers weapons on planned DMPI.
Adheres to TACSOP valid delivery parameters.
Takes valid shots.

Prerequisite. AI-351.

Ordnance. 2 GBU-31/32/38 or 2 GBU-10/12/16, CATM-9, CATM-120, 40 Chaff/20 Flare for ALE-39 equipped aircraft/60 Chaff/60 Flare for ALE-47 equipped aircraft.

Range Requirements. RSTD, TGT, AA, EW, SST, TACTS, TGT-DISP, LSR, JDAM.

External Syllabus Support. Two adversaries and one tanker (if AAR required).

AI-353

1.3 R 4 FA-18A/C/D A NS

Goal. Conduct a division, night, high altitude, PGM AI mission against a target with integrated surface to air defenses. This flight will not be aggressed by adversaries IOT emphasize surface to air countertactics. Additionally, emphasize air-to-surface, tactical decision making, mutual support, target acquisition and target destruction.

Requirement. Attack and destroy a surface target. Plan a strike route using a mission planning system. Weaponeer a specific target. Execute ingress, ordnance delivery and egress tactics consistent with the threat. Execute division countertactics against surface to air threats.

Performance Standards

Recognizes and reacts appropriately to surface to air threats.
Delivers weapons on planned DMPI.
Adheres to TACSOP valid delivery parameters.
Adheres to TACSOP element de-confliction/lost sight game plans if applicable.

Prerequisite. AI-352.

Ordnance. 2 GBU-10/12/16, CATM-9, CATM-120, 40 Chaff/20 Flare for ALE-39 equipped aircraft/60 Chaff/60 Flare for ALE-47 equipped aircraft.

Range Requirements. RSTD, TGT, AA, EW, SST, TACTS, TGT-DISP, LSR.

External Syllabus Support. One tanker (if AAR required).

AI-354

1.3 R 4 FA-18A/C/D vs. 2 Adversaries A NS

Goal. Conduct a division, night, high altitude, PGM AI mission against a target with integrated air defenses. Emphasize air-to-surface and air-to-air mission planning, tactical decision making, mutual support, target acquisition and target destruction.

Requirement. Attack and destroy a surface target. Plan a strike route using a mission planning system. Weaponeer a specific target. Execute ingress, ordnance delivery and egress tactics consistent with the threat.

Performance Standards

Recognizes and reacts appropriately to threats.

Adheres to planned air-to-air timeline and tactics.
Delivers weapons on planned DMPI.
Adheres to TACSOP valid delivery parameters.
Takes valid shots.

Prerequisite. AI-353.

Ordnance. 2 GBU-31/32/38, CATM-9, CATM-120, 40 Chaff/20 Flare for ALE-39 equipped aircraft/60 Chaff/60 Flare for ALE-47 equipped aircraft.

Range Requirements. RSTD, TGT, AA, EW, SST, TACTS, TGT-DISP, LSR, JDAM.

External Syllabus Support. Two adversaries and one tanker (if AAR required).

8. Forward Air Controller (Airborne) FAC(A) - FA-18D

a. Purpose. To develop proficiency in FAC(A).

b. General

(1) The JCAS AP MOA 2004-02 (referred to as the JFAC(A) MOA) provided the minimum standard for certification and qualification as a FAC(A). Meeting the T&R syllabus requirements for FAC(A) will meet or exceed the JFAC(A) MOA requirements. The JFAC(A) MOA can be found on the SIPRNET at <http://jfaca.mawts1.usmc.smil.mil>. Aircrew conducting FAC(A) operations shall comply with the policies contained in the most recent version of the JFAC(A) MOA.

(2) Prior to beginning this stage, FA-18D pilots shall be designated as a section leader by the commanding officer and be AR proficient. WSOs shall be BAS, CAS and AR proficient.

(3) Nonqualified aircrew will fly FAC(A)-382 through FAC(A)-390 with a MAWTS-1 certified FA-18D FAC(A)I designated by the commanding officer. The FAC(A)I may be in the FAC(A) or escort aircraft. The FAC(A)I may simulate the ground FAC if one is not available.

(4) Upon successful completion of this stage of training through FAC(A)-390 and compliance with JFAC(A) MOA certification requirements, the commanding officer may issue a T&R FAC(A) qualification as well as a JFAC(A) MOA FAC(A) certification.

(5) A non-qualified FAC(A) aircrew must have a FAC(A)I in the section and may not control CAS aircraft delivering actual ordnance closer than the most conservative of minimum safe distance, 1000 meters, or range regulations. A FAC(A) qualified aircrew (pilot and WSO for FA-18D) may not employ CAS aircraft delivering actual ordnance closer than the most conservative of minimum safe distance or range regulations.

(6) In an FA-18D aircraft separate work-up sorties are preferred for each crew member. If both FA-18D aircrew are undergoing FAC(A) qualification concurrently, then they should split the tactical briefing and debriefing responsibilities in each flight.

(7) FAC(A)-388 through FAC(A)-390 are exercises in integrating the fire support assets previously controlled separately in the FAC(A) syllabus. The intent is to expose prospective FAC(A) aircrew to the unique challenges

posed by each asset when integrated with FW CAS. Each sortie should concentrate on the integration procedures for a different asset, culminating in a final FAC(A)-390 checkride using multiple fire support assets. If FAC(A)-388 integrates IDFS assets, FAC(A)-389 should integrate RW/UAV CAS and vice versa. If RW/UAV assets are integrated, emphasis is on combined or sectorized sequential attacks. If IDFS is integrated, emphasis is on altitude or lateral de-confliction of fires effects using standard SEAD templates. At a minimum, IDFS must be integrated into one of the sorties in the FAC(A)-388 through FAC(A)-390 range, with FAC(A)-388 being the preferred sortie.

(8) Failure to meet JFAC(A) MOA proficiency or currency requirements, or loss of proficiency (delinquent refly factor) for all associated FAC(A) qualification events (per paragraph 500.1.b), constitutes loss of the FAC(A) qualification.

(9) Aircrew who have lost the FAC(A) qualification due to failure to meet JFAC(A) MOA Proficiency or Currency requirements shall regain the FAC(A) qualification by successfully completing events as delineated in the appropriate T&R syllabus under the supervision of a qualified FAC(A). At a minimum, such aircrew must complete the number and category (appropriate night, control type, ordnance, etc.) of controls the individual failed to accomplish during the appropriate Currency or Proficiency period (Currency - 2 controls in 90 days. Proficiency - 6 controls in a six month period; 4 of these 6 controls must be Type I, 1 control must be at night, and at least 1 must control an asset that expends ordnance).

(10) Aircrew who have lost the FAC(A) qualification due to exceeding the refly interval in all associated qualification events, or who have been FAC(A) unqualified for 18 consecutive months per the JFAC(A) MOA, shall regain qualification by completing the Refresher FAC(A) syllabus under the supervision of a FAC(A)I and conduct a minimum of 6 controls (4 of these 6 controls must be Type I, 1 control must be at night, and at least 1 must control an asset that expends ordnance).

(11) The intent of the T&R refly intervals is to meet the JFAC(A) MOA minimum requirements for currency/proficiency controls:

JFAC (A) MOA requirements				
Interval	Total Controls	Type 1	Night	Ordinance
90 days	2	*	*	*
180 days	6	4	1	1
* No specified requirements in these areas for this interval				

(12) Escort aircraft that are not flown by a FAC(A)I conducting instruction during a FAC(A) workup will log a FAC(A)-391 (FAC(A) Escort) code. Escort aircraft that are flown by a FAC(A)I conducting instruction during a FAC(A)/FAC(A)I workup will log the appropriate FAC(A) code and log the FAC(A) controls. Escort aircraft will not fulfill the external support requirement of a FW CAS element for any FAC(A) qualification workup sortie.

c. Ground/Academic Training. Refer to MAWTS-1 Course Catalog.

d. Flight and Simulator Event Training. (12 Events, 15 Hours).

<u>SFAC (A) -380</u>	<u>1.0</u>	<u>WTT/OFT</u>	<u>S</u>
----------------------	------------	----------------	----------

Goal. Type 1/2/3 FAC(A) Control procedures.

Requirement. Conduct Type 1/2/3 FAC(A) Controls. Emphasize C³ Integration, Target Area Flow/Timing, Sensor Management, Switchology and Crew Resource Management. Two Type 1, two Type 2 and two Type 3 controls required for completion. FAC(A)I at the simulator console must simulate C3 agencies, TACP and CAS aircraft.

Performance Standards
Correctly uses aircraft systems for target coordinate and 9-line generation.
Ensures proper coordination and approval for CAS attacks.
Positions FAC(A) aircraft appropriately to provide marking and control while executing FAC(A) profiles appropriate for threat/friendly locations/systems and environment.
Executes FAC(A) Type 1/2/3 control TTPs IAW JCAS using proper terminology.

Prerequisite. CAS-303 and SCAR-321.

SFAC(A)-381

1.0 WTT S

Goal. Adverse weather, High-Threat (restrictive) FAC(A) Control procedures.

Requirement. Conduct Type 1 High-threat FAC(A) Controls. Emphasize C3 Integration, Target Area Flow/Integration/Timing, Sensor Management, Switchology and Crew Resource Management. Four Type 1 controls required for completion. SEAD CFF mission must be given for each TOT. FAC(A)I at the simulator console must simulate C³ agencies, TACP, Indirect Fire assets and CAS aircraft. Simulated weather is overcast at 8,000 ft.

Performance Standards
Correctly uses aircraft systems for target coordinate and 9-line generation.
Ensures proper coordination and approval for IDF and CAS attacks.
Employs proper communications format with the firing unit.
Positions FAC(A) aircraft appropriately to provide marking and control while executing FAC(A) profiles appropriate for threat/friendly locations/systems and environment.
Executes FAC(A) Type 1/2/3 control TTPs IAW JCAS using proper terminology.

Prerequisite. SFAC(A)-380.

FAC(A)-382

1.3 1 FA-18D and 1 Escort A

Goal. Introduce FAC(A) FW Type 1 and 2 control procedures with Laser/PGMs in a low (permissive) threat environment.

Requirement. Perform visual/sensor reconnaissance of three separate targets on a tactical range, generating target coordinates with aircraft systems. Plot targets on gridded imagery/chart and prepare target briefs. Control two Type 1 and two Type 2 attacks by FW aircraft utilizing level and roll-in delivery profiles. Use appropriate CAS briefing and control procedures. Perform authentication procedures. Deliver or coordinate LASER mark on target and guide one LGW to impact. Provide BHA. Four controls required for

completion. If a range that permits Type 2 control is not available, Type 2 control may be evaluated with simulated JDAM/LGB deliveries.

Performance Standards

Executes appropriate Search/Detection/ID profiles.
Correctly uses aircraft systems for target coordinate and 9-line generation.
Provides LASER mark using proper J-LASER terminology and successfully guides LGW to impact, if required.
Executes FAC(A)/CAS attack profiles appropriate for threat/friendly locations/systems and environment.
Executes FAC(A) Type 1/2 control TTPs IAW JCAS using proper terminology.

Prerequisite. SFAC(A)-381.

Ordnance. TPOD with working LASER, 2 GBU-10/12/16, 250 rnds of 20mm, 40 Chaff/20 Flare for ALE-39 equipped aircraft/60 Chaff/60 Flare for ALE-47 equipped aircraft.

Range Requirements. RSTD, JCAS, SST, EXP.

External Syllabus Support. One or two FW CAS elements with live, inert or captive PGMs or Laser Guided Weapons and a ground FAC. LSTs are desired to aid in Type 1 control.

FAC(A)-383

1.3 R 1 FA-18D and 1 Escort A

Goal. Introduce FAC(A) FW Type 1/3 control procedures with GP ordnance in a low (permissive) threat environment.

Requirement. Perform visual/sensor reconnaissance of three separate targets on a tactical range, generating target coordinates with aircraft systems. Plot targets on gridded imagery/chart and prepare target briefs. Control three Type 1 and one Type 3 attacks by FW aircraft utilizing low threat tactics and GP Ordnance. Use appropriate CAS briefing and control procedures. Perform authentication procedures. Deliver or coordinate marking rounds on target, with a minimum of one mark via aircraft ordnance. Demonstrate the ability to provide timely, accurate corrections for CAS aircraft, and the ability to provide talk-ons. Provide BHA. Four controls required for completion.

Performance Standards

Executes appropriate Search/Detection/ID profiles.
Correctly uses aircraft systems for target coordinate and 9-line generation.
Provides accurate verbal description during talk-on attacks. When required, marks the target with a CEP less than 300 meters.
Executes FAC(A)/CAS attack profiles appropriate for threat/friendlies/systems and environment.
Executes FAC(A) Type 1/3 control TTPs IAW JCAS using proper terminology.

Prerequisite. SFAC(A)-381.

Ordnance. Two pods 2.75"/5.0" RP rockets, 40 Chaff/20 Flare for ALE-39 equipped aircraft/60 Chaff/60 Flare for ALE-47 equipped aircraft. TPOD with working LASER desired.

Range Requirements. RSTD, JCAS, SST, EXP.

External Syllabus Support. One or two FW CAS elements with live or inert GP ordnance and a ground FAC.

FAC(A)-384

1.3 1 FA-18D and 1 Escort A (NS)

Goal. Introduce FAC(A) RW Type 1, 2, and 3 control procedures in a low (permissive) threat environment.

Requirement. Perform visual/sensor reconnaissance of three targets on a tactical range, generating target coordinates with aircraft systems. Plot targets on gridded imagery/chart and prepare target briefs. Control two Type 1, two Type 2 and one Type 3 attacks by attack helicopters. Use appropriate RW CAS briefing and control procedures. Perform authentication procedures. Deliver marking rounds/talk-on (rockets/guns/TOW) or provide laser designation (Hellfire). If conducted at night, use appropriate tactics for target illumination if necessary. For Type 1 (rockets/guns) controls emphasis should be on providing corrections, ensuring compliance with limit-of-advance and providing threat lookout for RW assets in the target area. For Type 1 (TOW) controls emphasis should be on providing a target sort and ensuring no friendlies in the SDZ. Two TOW/Hellfire controls are required for completion. One of the two controls must have the FAC(A) lasing for Hellfire employment. Simulated TOW and captive Hellfire are acceptable.

Performance Standards

Executes appropriate Search/Detection/ID profiles.
Correctly uses aircraft systems for target coordinate and 9-line generation.
Provides accurate verbal description during talk-on attacks.
If required, marks the target with a CEP less than 300 meters.
Provides LASER mark using proper J-LASER terminology.
Executes FAC(A)/CAS attack profiles appropriate for threat/friendlies/systems and environment.
Executes FAC(A) Type 1/2/3 control TTPs IAW JCAS using proper terminology.

Prerequisite. SFAC(A)-381.

Ordnance. TPOD with working LASER, 2 GBU-10/12/16 or 2 pods 2.75"/5.0" RP rockets, 40 Chaff/20 Flare for ALE-39 equipped aircraft/60 Chaff/60 Flare for ALE-47 equipped aircraft.

Range Requirements. RSTD, JCAS, SST, EXP.

External Syllabus Support. One or two RW CAS elements with live/captive Hellfire and a ground FAC.

FAC(A)-385

1.3 1 FA-18D and 1 Escort A (NS)

Goal. Introduce FAC(A) Type 1/2/3 control procedures in an urban environment.

Requirement. Perform visual/sensor reconnaissance of three separate targets in an urban environment, generating target coordinates with aircraft systems. Plot targets on Gridded Reference Graphic (GRG) and prepare target briefs. Control two Type 1 and two Type 2/3 attacks by aircraft. Use appropriate CAS briefing and control procedures. Deliver or coordinate marks as required. Demonstrate the ability to provide timely, accurate corrections for CAS aircraft, and the ability to provide GRG-based talk-ons. Integrate fires with ground FAC via datalink from TPOD to remote station, if so equipped. Four controls required for completion.

Performance Standards

Executes appropriate Search/Detection/ID profiles.
Correctly uses aircraft systems for target coordinate, 9-line and BHA generation.
Provides accurate verbal description during GRG talk-on attacks.
Executes FAC(A)/CAS attack profiles appropriate for threat/friendly locations/systems and environment.
Executes FAC(A) Type 1/2/3 control TTPs IAW JCAS using proper terminology.

Prerequisite. SFAC(A)-381.

Ordnance. TPOD with working LASER and ISR Datalink, 1 AGM-65E (captive or live), 1 GBU-10/12/16, 250 rnds of 20mm, 40 Chaff/20 Flare for ALE-39 equipped aircraft/60 Chaff/60 Flare for ALE-47 equipped aircraft.

Range Requirements. JCAS, SST, EXP, URBN WPNS.

External Syllabus Support. One or more FW or RW CAS elements, and a ground FAC. Ground FAC/JTAC should have capability to receive TPOD video via datalink.

FAC(A)-386

1.3 1 FA-18D and 1 Escort A (NS)

Goal. Introduce mortar/artillery airspot.

Requirement. Perform visual/sensor reconnaissance on three tactical targets, generating target coordinates with aircraft systems. Plot targets on gridded imagery/chart and prepare a call-for-fire brief. Emphasize accurate call-for-fire communications and adjustment procedures. One LASER adjust fire, one immediate suppression, one SEAD mission, and one high threat SEAD mission. Emphasis on high-threat airspot is FAC(A) positioning to provide redundant mark and accurate corrections for IDFS with simulated weather of overcast at 8,000 ft MSL. Both SEAD missions must include marking and suppression targets.

Performance Standards

Executes appropriate Search/Detection/ID profiles.
Correctly uses aircraft systems for target coordinate and 9-line generation.
Employs proper communications format with the firing unit.
Provides timely and accurate corrections to the firing unit.
Completes an immediate suppression CFF within 60 seconds of receiving the mission from the FAC/FO.

Prerequisite. SFAC(A)-381.

Ordnance. TPOD with working LASER, 40 Chaff/20 Flare for ALE-39 equipped aircraft/60 Chaff/60 Flare for ALE-47 equipped aircraft.

Range Requirements. JCAS, SST, EXP.

External Syllabus Support. Indirect Fire Support (IDFS) asset (mortars or artillery) and a ground FAC or FO. IDFS asset requires a minimum of 10 HE rds, 2 WP rds, and 8 Illum rds.

FAC(A)-387

1.3 R 1 FA-18D and 1 Escort A NS

Goal. Introduce FAC(A) Night Systems procedures in a low (permissive) threat environment.

Requirement. Perform visual/sensor reconnaissance of three separate targets on a tactical range, generating target coordinates with aircraft systems. Plot targets on gridded imagery/chart and prepare target briefs. Control two Type 1 and two Type 2 attacks by FW aircraft. Use appropriate CAS briefing and control procedures. Perform authentication procedures. Deliver or coordinate marking rounds or IR/LASER mark on target. At least one Type 1 control must use an IR pointer, if so equipped. At least one Type 1 control must be supported by air-delivered covert illumination (LUU-19). Demonstrate the ability to provide timely, accurate corrections for CAS aircraft. Provide BHA. Four controls required for completion. If a range that permits Type 2 control is not available, Type 2 control may be evaluated with simulated JDAM/LGB deliveries. If LUU-19s are not available, LUU-2s/Illum rockets may be substituted.

Performance Standards

Executes appropriate Search/Detection/ID profiles.
Correctly uses aircraft systems for target coordinate and 9-line generation.
Provides IR/LASER mark using proper terminology.
Executes FAC(A)/CAS attack profiles appropriate for threat/friendly locations/systems and environment.
Executes FAC(A) Type 1/2 control TTPs IAW JCAS using proper terminology.

Prerequisite. SFAC(A)-381.

Ordnance. TPOD with working LASER, 2 GBU-10/12/16 or 2 pods 2.75"/5.0" RP rockets, 4 LUU-19/LJU-2 or 1 pod 2.75" Illum rockets, 40 Chaff/20 Flare for ALE-39 equipped aircraft/60 Chaff/60 Flare for ALE-47 equipped aircraft.

Range Requirements. JCAS, SST, EXP.

External Syllabus Support. One or two FW CAS elements and a ground FAC.

FAC(A)-388

1.3 R 1 FA-18D and 1 Escort A

Goal. Introduce FAC(A) two-element integration procedures in a day, medium (restrictive) threat environment.

Requirement. Perform visual/sensor reconnaissance of three separate targets on a tactical range, generating target coordinates with aircraft systems. Plot targets on gridded imagery/chart and prepare target briefs. Control four Type 1 attacks by FW aircraft utilizing medium threat tactics. A minimum of two CAS profiles must be pop-up attacks. Emphasis during these pop-up attacks is on FAC(A) positioning for redundant marking and Type 1 control. Deliver or coordinate marks on target. Demonstrate the ability to provide timely, accurate corrections for CAS aircraft. Provide BHA. Four controls required for completion.

Performance Standards

Executes appropriate Search/Detection/ID profiles.
Correctly uses aircraft systems for target coordinate and 9-line generation.
Ensures proper coordination and approval for IDF, rotary wing and fixed wing attacks.
Executes FAC(A)/CAS attack profiles appropriate for threat/friendly locations/systems and environment.
Executes FAC(A) Type 1/2/3 control TTPs IAW JCAS using proper terminology.

Prerequisite. FAC(A)-382-387.

Ordnance. 2 GBU-10/12/16 or 2 pods 2.75"/5.0" RP rockets, 40 Chaff/20 Flare for ALE-39 equipped aircraft/60 Chaff/60 Flare for ALE-47 equipped aircraft. TPOD with working LASER desired.

Range Requirements. JCAS, EXP.

External Syllabus Support. One FW CAS element, One additional Fire support asset (RW CAS/UAV CAS/IDFS) and a ground FAC. If IDFS is to be used 10 HE rds, 4 WP rds for marking or suppression required.

FAC(A)-389

1.3 R 1 FA-18D and 1 Escort A NS

Goal. Introduce FAC(A) two-element integration procedures in a night, medium (restrictive) threat environment.

Requirement. Perform visual/sensor reconnaissance of three separate targets on a tactical range, generating target coordinates with aircraft systems. Plot targets on gridded imagery/chart and prepare target briefs. Control two Type 1 and two Type 2 attacks by FW aircraft utilizing medium threat tactics. Deliver or coordinate marks on target. Demonstrate the ability to provide timely, accurate corrections for CAS aircraft. Provide BHA. Four controls required for completion. If a range that permits Type 2 control is not available, Type 2 control may be evaluated with simulated JDAM/LGB deliveries.

Performance Standards

Executes appropriate Search/Detection/ID profiles.
Correctly uses aircraft systems for target coordinate and 9-line generation.
Ensures proper coordination and approval for IDF, rotary wing and fixed wing attacks.

Executes FAC(A)/CAS attack profiles appropriate for threat/friendly locations/systems and environment.
Executes FAC(A) Type 1/2/3 control TTPs IAW JCAS using proper terminology.

Prerequisite. FAC(A)-388.

Ordnance. TPOD with working LASER, 2 GBU-10/12/16 or 2 pods 2.75"/5.0" RP rockets, 40 Chaff/20 Flare for ALE-39 equipped aircraft/60 Chaff/60 Flare for ALE-47 equipped aircraft.

Range Requirements. JCAS, EXP.

External Syllabus Support. One FW CAS element, One additional Fire support asset (RW CAS/UAV CAS/IDFS) and a ground FAC. If IDFS is to be used 10 HE rds, 4 WP rds for marking or suppression required.

FAC(A)-390

1.3 R 1 FA-18D and 1 Escort A (NS)

Goal. Practice FAC(A) multi-element and supporting arms integration.

Requirement. Perform visual/sensor reconnaissance, generating target coordinates with aircraft systems. Plot targets on gridded imagery/chart and prepare target briefs. Plan and execute at least one integrated attack utilizing 3 or more elements. For FW/RW/UAV integration, emphasis is on conducting a sectorized simultaneous or combined sequential attack. For CAS/IDFS integration, time, altitude or lateral de-confliction can be used. This evaluation sortie should be flown in a MAGTF level exercise if possible.

Performance Standards

Executes appropriate Search/Detection/ID profiles.
Correctly uses aircraft systems for target coordinate and 9-line generation.
Ensures proper coordination and approval for IDF and CAS attacks.
Executes FAC(A)/CAS attack profiles appropriate for threat/friendly locations/systems and environment.
Executes FAC(A) Type 1/2/3 control TTPs IAW JCAS using proper terminology.

Prerequisite. FAC(A)-389.

Ordnance. TPOD with working LASER, 2 GBU-10/12/16 or 2 pods 2.75"/5.0" RP rockets, 40 Chaff/20 Flare for ALE-39 equipped aircraft/60 Chaff/60 Flare for ALE-47 equipped aircraft.

Range Requirements. JCAS, EXP.

External Syllabus Support. Minimum of 3 Fire Support assets (FW CAS/RW CAS/UAV CAS/IDFS) and a ground FAC. IDFS asset requires 10 HE rds, 4 WP rds.

FAC(A)-391

1.3 2 FA-18D A (NS)

Goal. Introduce escort procedures for FAC(A) wingman.

Requirement. Perform wingman duties during a FAC(A) mission. Provide mutual support, threat lookout, and duties assigned by the FAC(A) aircraft. Emphasis on communications relay and backup marks.

Performance Standards

Maintains mutual support and threat lookout throughout mission.
Maintains situational awareness to rapidly assist FAC(A) with backup marks and alternate radio communications.

Prerequisite. 200 level complete.

Ordinance. TPOD with working LASER, 1 AGM-65E (captive or live), 1 GBU-10/12/16 or 2 pods 2.75"/5.0", 40 Chaff/20 Flare for ALE-39 equipped aircraft/60 Chaff/60 Flare for ALE-47 equipped aircraft.

Range Requirements. MOA, JCAS, EXP.

External Syllabus Support. 2+ CAS aircraft. Indirect fire and C³ agencies preferred.

9. Tactical Air Coordinator (Airborne) TAC(A)

a. Purpose. To develop proficiency in TAC(A).

b. General

(1) This phase of training is designed for experienced aircrew.

(2) Prior to commencing the TAC(A) syllabus, aircrew must be FAC(A) qualified. Non-qualified aircrew will fly TAC(A)-390 and TAC(A)-391 with a MAWTS-1 certified TAC(A)I designated by the commanding officer. The TAC(A)I may be in the escort aircraft.

(3) The commanding officer may designate aircrew as TAC(A) qualified upon successful completion of this phase of training through TAC(A)-391.

c. Ground/Academic Training. Refer to MAWTS-1 Course Catalog.

d. Flight and Simulator Event Training. (2 Events, 2.6 Hours).

TAC(A)-392 1.3 R 1 FA-18D A (NS)

Goal. Introduce TAC(A) procedures.

Requirement. Integrate CAS with a single terminal controller [FAC/FAC(A)]. Manage airspace and multiple ingressing/egressing aircraft. Conduct airborne relay of target briefs. Minimum of two CAS elements required for completion.

Performance Standards

Able to accurately copy immediate JTAR.
Able to coordinate timely CAS in response to immediate request.
Able to pass CAS aircraft BDA via the C³ system.

Prerequisite. FAC(A)-390, FAC(A) qualified.

Range Requirements. MOA.

External Syllabus Support. Two CAS elements and one terminal controller [FAC/FAC(A)].

TAC(A)-393 1.3 1 FA-18D A (NS)

Goal. Practice TAC(A) procedures with multiple terminal controllers.

Requirement. Perform coordination of attack aircraft and multiple terminal controllers. Receive attack briefings from the FAC/FAC(A) and assign appropriate CAS aircraft. Coordinate target mark and control with the FAC/FAC(A). Manage assigned airspace and provide command and control system with essential elements of information. Perform authentication procedures (as required).

Performance Standards

Able to accurately copy immediate JTAR.

Able to coordinate timely CAS in response to immediate request.

Able to pass CAS aircraft BDA via the C3 system.

Prerequisite. TAC(A)-392.

Range Requirements. MOA.

External Syllabus Support. FAC, FAC(A), and 1 to 4 CAS elements.

133. CORE PLUS PHASE (400 LEVEL) TRAINING

1. General. This phase contains Core Plus skill training a community may accomplish. Although Core Plus Training events may provide valuable training opportunities, they are not measured as part of unit SORTS reporting. Skills contained in this level are associated with high risk, low probability of execution, and/or are theater/basing specific. This phase of training allows additional unit training flexibility.

2. Field Expeditionary/Carrier Landing Qualification (ECQ)

a. Purpose. To practice for carrier operations or qualify for EAF operations.

b. General. Each FCLP simulator is a prerequisite for the corresponding training flight when qualification is aboard a CV. Each FCLP flight is a training flight for CV qualification. Completion of ECQ 402 completes the EAF qualification syllabus. Completion of ECQ 404 completes the CV qualification syllabus.

c. Ground Training. IAW LSO NATOPS.

d. Flight and Simulator Event Training. (5 Events, 6.2 Hours).

SECQ-400 1.0 R OFT S

Goal. Conduct simulated carrier landings using Case I and Case III procedures. Emphasize pattern procedures, landing technique, deck procedures, and emergency procedures.

Requirement. Perform Case I and two Case III recoveries to multiple carrier landings. Four passes required for completion. Simulator must be monitored by an LSO.

External Syllabus Support. LSO.

ECQ-401

1.3 R 1 FA-18A/C/D A

Goal. Practice day FCLP procedures or qualify for day expeditionary landing operations.

Requirement. For FCLPs perform touch and go's under the control of an LSO. Six touch and go's required for completion. For EQ, perform 4 touch and go's, an arrested landing, and a launch from an expeditionary airfield.

Performance Standards

Fly 5 Fair [(OK)] passes IAW LSC NATOPS Criteria. Responds quickly and safely to all communications and comm out signals from LSO if required.

Prerequisite. SECQ-400.

Range Requirement. EAF or airfield with FCLP pattern, carrier box, and fresnel lens.

External Syllabus Support. LSO.

ECQ-402

1.3 R 1 FA-18A/C/D A N

Goal. Practice night FCLP procedures or qualify for night expeditionary landing operations.

Requirement. For FCLPs perform touch and go's under the control of an LSO. Six touch and go's required for completion. For EQ, perform four touch and go's, an arrested landing, and a launch from an expeditionary airfield.

Performance Standards

Fly five Fair [(OK)] passes IAW LSO NATOPS Criteria. Responds quickly and safely to all communications and comm out signals from LSO if required.

Prerequisite. ECQ-401.

Range Requirement. EAF or airfield with FCLP pattern, carrier box, and fresnel lens. For CQ, CV-compatible ACLS or ICLS.

External Syllabus Support. LSO.

ECQ-403

1.3 R 1 FA-18A/C/D A

Goal. Qualify for day carrier landing operations.

Requirement. IAW LSO NATOPS.

Performance Standards

IAW LSO NATOPS.

Prerequisite. ECQ-402.

External Syllabus Support. LSO.

ECQ-404 1.3 R 1 FA-18A/C/D A N

Goal. Qualify for night carrier landing operations.

Requirement. IAW LSO NATOPS.

Performance Standards
IAW LSO NATOPS.

Prerequisite. ECQ-403.

External Syllabus Support. LSO.

3. War-at-Sea (WAS)

a. Purpose. To conduct sea control missions.

b. General. These sorties are designed to be flown by a squadron as part of their training program in preparation for deployment as part of an embarked CVW.

c. Ground/Academic Training. Refer to NSAWC and applicable Strike-Fighter Wing Weapons School courses.

d. Flight and Simulator Event Training. (3 Events, 3.6 Hours).

SWAS-410 1.0 R WTT S

Goal. Conduct simulated mine-laying operations. Emphasize mine line planning, proper stores management, switchology, and mine placement.

Requirement. Perform a minimum of three runs using flight director(FD) mode and one run using AUTO.

Performance Standards
Mine placement IAW mission planning.
Mine delivery IAW specified profile.
Proper use of Flight Director mode.

WAS-411 1.3 R 2 FA-18A/C A (NS)

Goal. Conduct a Sea Surface Control (SSC) mission in support of the Anti-Surface Warfare Commander's objectives. Emphasize target acquisition, identification, command and control coordination, and weapons employment, if required.

Requirement. Conduct SSC in the assigned sector to locate, classify, identify, and engage surface contacts.

Performance Standards
Able to locate assigned targets using all available sensors.
Able to classify and identify surface contacts based on briefing and mission planning.
Obtains mission recorder data and/or target photographs of assigned targets.
Engage surface contacts with appropriate weapons.

Use clear, concise, correct communication with command and control agencies to maintain information flow.

Prerequisite. LAT Qualified (LAT-282) and AR-312.

Range Requirement. MOA.

External Syllabus Support Required. Controlling naval surface platform.

WAS-412

1.3 R 2 FA-18A/C A (NS)

Goal. Conduct a section or division War-at-Sea Exercise(WASEX) strike mission. Emphasize mission planning, target acquisition, tactical decision-making, mutual support, threat reaction, and target destruction.

Requirement. Attack and destroy hostile naval forces. Select appropriate weapons for assigned target/target sets. Execute ingress, ordnance delivery, and egress tactics consistent with the threat.

Performance Standards

Able to locate assigned targets using all available sensors.
Able to classify and identify surface contacts based on briefing and mission planning.
Maintains pre-briefed formation and mutual support.
Recognizes and reacts appropriately to threats.
Engage surface contacts with appropriate weapons.
Use clear, concise, correct communication with command and control agencies to maintain information flow.

Prerequisite. AI-352.

Range Requirements. MOA.

External Syllabus Support Required. Controlling naval surface platform.

4. Night Systems (NS)

a. Purpose. To develop proficiency using Night Vision Devices (NVDs) in the low altitude environment.

b. General

(1) A MAWTS-1 certified NSI (Low) pilot flight lead is required to fly with non-NSQ Low pilots for NS-430 through NS-432 in FA-18C aircraft. A MAWTS-1 certified NSI (Low) pilot flight lead and an NSI (Low) Pilot/WSO crewed with the non-NSQ Low aircrew are required for FA-18Ds.

(2) At the discretion of the commanding officer, NSQ Low aircrew may fly any night or night optional event in the T&R with the aid of NVDs. NSQ Low aircrew may fly to a minimum altitude of 1000 ft AGL in LLL conditions (lux less than 0.0022) and down to 300 ft AGL in HLL conditions (lux greater than 0.0022).

(3) After successful completion of NS-432, the aircrew is eligible to be designated NSQ Low qualified by the commanding officer.

(4) Aircrew shall be LAT and NSQ HI qualified prior to NSQ Low training. Consult T&R Program Manual for LAT and NS training policy.

c. Ground/Academic Training. Refer to MAWTS-1 Course Catalog.

d. Flight and Simulator Event Training. (3 Events, 3.9 Hours).

NS-430 1.3 2 FA-18A/C/D A NS

Goal. Practice low altitude ingress, target acquisition and target attacks at night in the LAT environment.

Requirement. Conduct a section low level and section attacks. One low level and four section attacks on a scored raked range required for completion.

Performance Standards

Knows and understands visual illusions associated with NVD usage.

Achieves a valid ordnance deliveries IAW the TACSOP valid delivery requirements.

Adheres to tactical abort parameters.

Prerequisite. NSQ Hi (NS-254) and LAT Qualified (LAT-282).

Ordnance. 6 MK-76, 40 Chaff/20 Flare for ALE-39 equipped aircraft/60 Chaff/60 Flare for ALE-47 equipped aircraft.

Range Requirements. RSTD, RKD RNG, EXP.

External Syllabus Support. Approved MTR, scored raked range.

NS-431 1.3 2 FA-18A/C/D A NS

Goal. Introduce night single ship conventional LAT using NVDs. Emphasize LAT procedures using NVDs, communications, and maneuver techniques.

Requirement. As a single ship, perform descent to CL, straight and level, ridgeline crossings, and Nav/Hard/Break turns and Level S. Two circuits required for completion, the first circuit at CL no lower than 500 ft AGL and the remaining circuits at CL no lower than 300 ft AGL.

Performance Standards

Knows and understands visual illusions associated with NVD usage.

Knows and understands mission cross check times.

Prerequisite. NS-430.

Range Requirements. LAT.

External Syllabus Support. Certified LAT course.

NS-432 1.3 R 2 FA-18A/C/D A NS

Goal. Introduce night section 2 dimensional LAT using NVDs and evaluate Night Systems procedures.

Requirement. As a wingman, perform descent to CL, straight and level, turns, ridgeline crossings, night formations, section level S, and section attacks. Two circuits required for completion, the first circuit at CL no lower than 500 ft AGL and the remaining circuits at CL no lower than 300 ft AGL.

Performance Standards

Able to maintain formation in the LAT environment.
Knows guidelines for NVD use outlined in T&R Program Manual.
Executes successful target attack and maintains mutual support.
Achieves valid deliveries IAW the TACSOP valid delivery requirements.
Adheres to tactical abort parameters.

Prerequisite. NS-431.

Ordinance. 6 MK-76, 40 Chaff/20 Flare for ALE-39 equipped aircraft/60 Chaff/60 Flare for ALE-47 equipped aircraft.

Range Requirements. LAT.

External Syllabus Support. Certified LAT course.

5. Escort (ESC)

a. Purpose. To develop proficiency in conducting convoy and assault support escort missions.

b. General. Emphasize mission planning, tactical decision making, element positioning, threat acquisition, neutralization or destruction. Aircraft should be configured with operable VTR/CVRS, ALR-67, CATM-9, targeting FLIR, KY-58, chaff, and flares when possible.

c. Ground/Academic Training. Refer to MAWTS-1 Course Catalog.

d. Flight and Simulator Event Training. (2 Events, 2.6 Hours).

ESC-440 1.3 R 2 FA-18A/C/D A (NS)

Goal. Conduct convoy escort. Emphasize mission planning, target precedence, search pattern, attack parameters, delivery modes, designation techniques, and information flow through the C³ system.

Requirement. Conduct convoy escort along a route to locate and destroy targets of opportunity in a low or medium threat environment.

Performance Standards

- Locate and attack targets.
- Informs convoy leader of threats.
- Maintain mutual support with convoy.
- Effectively communicates status of convoy to C³ agencies.

Prerequisite. 200 level complete, AR-312.

Ordinance. CATM-9, 4 BDU-45/MK-83 inert, 40 Chaff/20 Flare for ALE-39 equipped aircraft/60 Chaff/60 Flare for ALE-47 equipped aircraft.

Range Requirements. RSTD, LSR, TGT-DISP, TGT-MOVE, EXP, TGT.

External Syllabus Support. Minimum 1 vehicle convoy. 2 rotary wing escort aircraft desired.

ESC-441

1.3 R 2 FA-18A/C/D A (NS)

Goal. Conduct assault support escort. Emphasize mission planning, target precedence, search pattern, attack parameters, delivery modes, designation techniques, and information flow through the C³ system.

Requirement. Conduct assault support along a route to locate and destroy targets of opportunity in a low or medium threat environment.

Performance Standards

Locate and attack targets.
Informs assault support flight of threats.
Maintain mutual support with assault support package.
Effectively communicates status of assault support package to C³ agencies.

Prerequisite. 200 level complete, AR-312.

Ordinance. CATM-9, 4 BDU-45/MK-83 inert, 40 Chaff/20 Flare for ALE-39 equipped aircraft/60 Chaff/60 Flare for ALE-47 equipped aircraft.

Range Requirements. RSTD, LSR, TGT-DISP, TGT-MOVE, EXP, TGT.

External Syllabus Support. Minimum 1 Helicopter/Assault support package.

6. Anti-Air Warfare (AAW)

a. Purpose. To utilize core skills in employing the FA-18 in Anti-Air Warfare missions.

b. General. Emphasize mission planning, mutual support, knowledge of air-to-air weapons and tactics, sensor usage, standardized communication, weapons employment, AIC integration, short range radar mechanics, and targeting.

c. Ground/Academic Training. Refer to MAWTS-1 Course Catalog.

d. Flight and Simulator Event Training. (1 Events, 1.3 Hours).

AAW-450

1.3 R 2 FA-18A/C/D vs. 1+ Rotary Wing/Prop Aircraft A (NS)

Goal. Introduce aircrew to helicopter/prop aircraft attack. Emphasize optimum weapons employment profiles.

Requirement. Conduct visual attacks against helicopters/prop aircraft using appropriate captive air-to-air and simulated air-to-ground ordnance. One attack with a radar missile, one attack with the CATM-9, one attack with the air-to-air gun, one attack with the air-to-ground gun, and one attack with GP bomb required for completion.

Performance Standards
Maintains offensive position on adversary aircraft.
Valid air-to-air and air-to-ground weapons employment.

Prerequisite. ACM and LAT qualified, AAW-338.

Ordnance. CATM-9, 40 Chaff/20 Flare for ALE-39 equipped aircraft/60 Chaff/60 Flare for ALE-47 equipped aircraft, and CATM-7/120.

Range Requirements. AA, EXP.

External Syllabus Support. One or more helicopters/prop aircraft.

7. Large Force Exercise (LFE)

a. Purpose. To conduct advanced LFE missions.

b. General. Emphasize mission planning, large force integration both ground and airborne, administrative and tactical decision making, and mission accomplishment. Aircraft should be configured with operable VTR/CVRS, ALR-67, CATM-9, TACTS pod, targeting FLIR, KY-58, chaff, and flares when possible. Upon the completion of the LFE log the LFE T&R code and the 300 level AAW or AI T&R code.

c. Ground/Academic Training. None.

d. Flight and Simulator Event Training. (2 Events, 2.6 Hours).

LFE-470 1.3 R 6+ FA-18A/C/D vs. 4+ Adversaries A

Goal. Participate in a day LFE. Emphasize mission planning, integration, decision making and mission accomplishment.

Requirement. Participate in the planning and execution of a day LFE AI, OCA or DCA mission with a minimum of 10 aircraft.

Performance Standards
Effectively integrates into the LFE package.

Prerequisite. 200 level complete.

Ordnance. TBD.

Range Requirements. AA, TGT, EXP, MACH 1+, LSR, SST, EW, JDAM, TGT-DISP.

External Syllabus Support. One tanker (if AAR required), 4 or more adversaries.

LFE-471 1.3 R 6+ FA-18A/C/D vs. 4+ Adversaries A NS

Goal. Participate in a night LFE. Emphasize mission planning, integration, decision making and mission accomplishment.

Requirement. Participate in the planning and execution of a night LFE AI, OCA or DCA mission with a minimum of 10 aircraft.

Performance Standards

Effectively integrates into the LFE package.

Prerequisite. 200 level complete.

Ordnance. TBD.

Range Requirements. AA, TGT, EXP, MACH 1+, LSR, SST, EW, JDAM, TGT-DISP.

External Syllabus Support. One tanker (if AAR required), 4 or more adversaries.

8. Forward Air Controller (Airborne) FAC(A)

a. Purpose. To develop proficiency in FAC(A).

b. General

(1) The JCAS AP MOA 2004-02 (referred to as the JFAC(A) MOA) provided the minimum standard for certification and qualification as a FAC(A). Meeting the T&R syllabus requirements for FAC(A) will meet or exceed the JFAC(A) MOA requirements. The JFAC(A) MOA can be found on the SIPRNET at <http://jfaca.mawts1.usmc.smil.mil>. Aircrew conducting FAC(A) operations shall comply with the policies contained in the most recent version of the JFAC(A) MOA.

(2) Prior to beginning this stage, FA-18A/C pilots will be either a division leader with prior ground FAC or FAC(A) experience or a Mission Commander.

(3) FA-18A/C FAC(A) pilots will log 400-level codes for their FAC(A) syllabus [i.e. FAC(A)-383 becomes FAC(A)-483]. FAC(A)-491 through FAC(A)-496 sorties are not required for initial FAC(A) qualification and are FAC(A) core plus sorties for both FA-18D and FA-18A/C.

(4) Nonqualified aircrew will fly FAC(A)-482 through FAC(A)-490 with a MAWTS-1 certified FA-18A/C FAC(A)I or and FA-18D FAC(A)I crew designated by the commanding officer. The FAC(A)I will be in the escort aircraft. The FAC(A)I may simulate the ground FAC if one is not available.

(5) Upon successful completion of this stage of training through FAC(A)- 490 and compliance with JFAC(A) MOA certification requirements, the commanding officer may issue a T&R FAC(A) qualification as well as a JFAC(A) MOA FAC(A) certification.

(6) A non-qualified FAC(A) pilot must have a FAC(A)I in the section and may not control CAS aircraft delivering actual ordnance closer than the most conservative of minimum safe distance, 1000 meters, or range regulations. A FAC(A) qualified pilot may not employ CAS aircraft delivering actual ordnance closer than the most conservative of minimum safe distance or range regulations.

(7) FAC(A)-488 through FAC(A)-490 are exercises in integrating the fire support assets previously controlled separately in the FAC(A) syllabus. The intent is to expose prospective FAC(A) aircrew to the unique challenges posed by each asset when integrated with FW CAS. Each sortie should concentrate on the integration procedures for a different asset, culminating in a final FAC(A)-490 checkride using multiple fire support assets. If FAC(A)-488 integrates IDFS assets, FAC(A)-389 should integrate RW/UAV CAS and

vice versa. If RW/UAV assets are integrated, emphasis is on combined or sectored sequential attacks. If IDFS is integrated, emphasis is on altitude or lateral de-confliction of fires effects using standard SEAD templates. At a minimum, IDFS must be integrated into one of the sorties in the FAC(A)-388/488 through FAC(A)-490 range, with FAC(A)-488 being the preferred sortie.

(8) Due to the high-task loading nature of the FAC(A) mission, pilots who achieved their initial FAC(A) qualification in an FA-18D, will complete the entire qualification syllabus in an FA-18A/C under the supervision of a FAC(A)I, in accordance with paragraph (4) above, prior to being FAC(A) qualified in an FA-18A/C squadron. An FA-18D FAC(A)I may attain an FA-18A/C FAC(A)I in accordance with the requirements of the MAWTS-1 Course Catalog.

(9) Failure to meet JFAC(A) MOA proficiency or currency requirements, or loss of proficiency (delinquent refly factor) for all associated FAC(A) qualification events (per paragraph 500.1.b), constitutes loss of the FAC(A) qualification.

(10) Aircrew who have lost the FAC(A) qualification due to failure to meet JFAC(A) MOA Proficiency or Currency requirements shall regain the FAC(A) qualification by successfully completing events as delineated in the appropriate T&R syllabus under the supervision of a qualified FAC(A). At a minimum, such aircrew must complete the number and category (appropriate night, control type, ordnance, etc.) of controls the individual failed to accomplish during the appropriate Currency or Proficiency period (Currency - 2 controls in 90 days. Proficiency - 6 controls in a six month period; 4 of these 6 controls must be Type I, 1 control must be at night, and at least 1 must control an asset that expends ordnance).

(11) Aircrew who have lost the FAC(A) qualification due to exceeding the refly interval in all associated qualification events, or who have been FAC(A) unqualified for 18 consecutive months per the JFAC(A) MOA, shall regain qualification by completing the Refresher FAC(A) syllabus under the supervision of a FAC(A)I and conduct a minimum of 6 controls (4 of these 6 controls must be Type I, 1 control must be at night, and at least 1 must control an asset that expends ordnance).

JFAC(A) MOA requirements				
Interval	Total Controls	Type 1	Night	Ordnance
90 days	2	*	*	*
180 days	6	4	1	1
* No specified requirements in these areas for this interval				

(12) The intent of the T&R refly intervals is to meet the JFAC(A) MOA minimum requirements for currency/proficiency controls:

(13) Escort aircraft that are not flown by a FAC(A)I conducting instruction during a FAC(A) workup will log a FAC(A)-495 (FAC(A) Escort) code. Escort aircraft that are flown by a FAC(A)I conducting instruction during a FAC(A)/FAC(A)I workup will log the appropriate FAC(A) code and log the FAC(A) controls. FA-18A/C FAC(A) flights should fly as a section, while the escort for an FA-18A/C FAC(A) shall be 200 level complete. Escort aircraft will not fulfill the external support requirement of a FW CAS element for any FAC(A) qualification workup sortie.

- c. Ground/Academic Training. Refer to MAWTS-1 Course Catalog.
- d. Flight and Simulator Event Training. (16 Events, 20.2 hours).

SFAC(A)-480 1.0 WTT S

Goal. Type 1/2/3 FAC(A) Control procedures.

Requirement. Conduct Type 1/2/3 FAC(A) Controls. Emphasize C³ Integration, Target Area Flow/Timing, Sensor Management, Switchology and Crew Resource Management. Two Type 1, two Type 2 and two Type 3 controls required for completion. FAC(A)I at the simulator console must simulate C³ agencies, TACP and CAS aircraft.

Performance Standards

Correctly uses aircraft systems for target coordinate and 9-line generation.

Ensures proper coordination and approval for CAS attacks.

Positions FAC(A) aircraft appropriately to provide marking and control while executing FAC(A) profiles appropriate for threat/friendly locations/systems and environment.

Executes FAC(A) Type 1/2/3 control TTPs IAW JCAS using proper terminology.

Prerequisite. Academic requirements complete, Division Leader with FAC / FAC(A) experience or Mission Commander. CAS-303 and SCAR-321 complete.

SFAC(A)-481 1.0 WTT S

Goal. Adverse weather, High-Threat (restrictive) FAC(A) Control procedures.

Requirement. Conduct Type 1 High-threat FAC(A) Controls. Emphasize C³ Integration, Target Area Flow/Integration/Timing, Sensor Management, Switchology and Crew Resource Management. Four Type 1 controls required for completion. SEAD CFF mission must be given for each TOT. FAC(A)I at the simulator console must simulate C³ agencies, TACP, Indirect Fire assets and CAS aircraft. Simulated weather is overcast at 8,000 ft.

Performance Standards

Correctly uses aircraft systems for target coordinate and 9-line generation.

Ensures proper coordination and approval for IDF and CAS attacks.

Employs proper communications format with the firing unit.

Positions FAC(A) aircraft appropriately to provide marking and control while executing FAC(A) profiles appropriate for threat/friendly locations/systems and environment.

Executes FAC(A) Type 1/2/3 control TTPs IAW JCAS using proper terminology.

Prerequisite. SFAC(A)-480 complete.

FAC(A)-482 1.3 1 FA-18A/C and 1 Escort A

Goal. Introduce FAC(A) FW Type 1 and 2 control procedures with Laser/PGMs in a low (permissive) threat environment.

Requirement. Perform visual/sensor reconnaissance of three separate targets on a tactical range, generating target coordinates with aircraft systems. Plot targets on gridded

imagery/chart and prepare target briefs. Control two Type 1 and two Type 2 attacks by FW aircraft utilizing level and roll-in delivery profiles. Use appropriate CAS briefing and control procedures. Perform authentication procedures. Deliver or coordinate LASER mark on target and guide one LGW to impact. Provide BHA. Four controls required for completion. If a range that permits Type 2 control is not available, Type 2 control may be evaluated with simulated JDAM/LGB deliveries.

Performance Standards

Executes appropriate Search/Detection/ID profiles.
Correctly uses aircraft systems for target coordinate and 9-line generation.
Provides LASER mark using proper J-LASER terminology and successfully guides LGW to impact, if required.
Executes FAC(A)/CAS attack profiles appropriate for threat/friendly locations/systems and environment.
Executes FAC(A) Type 1/2 control TTPs IAW JCAS using proper terminology.

Prerequisite. SFAC(A)-481.

Ordnance. TPOD with working LASER, 2 GBU-10/12/16, 250 rnds of 20mm, 40 Chaff/20 Flare for ALE-39 equipped aircraft/60 Chaff/60 Flare for ALE-47 equipped aircraft.

Range Requirements. RSTD, JCAS, SST, EXP.

External Syllabus Support. One or two FW CAS elements with live, inert or captive PGMS or Laser Guided Weapons and a ground FAC. LSTs are desired to aid in Type 1 control.

FAC(A)-483

1.3

R 1 FA-18A/C and 1 Escort A

Goal. Introduce FAC(A) FW Type 1/3 control procedures with GP ordnance in a low (permissive) threat environment.

Requirement. Perform visual/sensor reconnaissance of three separate targets on a tactical range, generating target coordinates with aircraft systems. Plot targets on gridded imagery/chart and prepare target briefs. Control three Type 1 and one Type 3 attacks by FW aircraft utilizing low threat tactics and GP Ordinance. Use appropriate CAS briefing and control procedures. Perform authentication procedures. Deliver or coordinate marking rounds on target, with a minimum of one mark via aircraft ordnance. Demonstrate the ability to provide timely, accurate corrections for CAS aircraft, and the ability to provide talk-ons. Provide BHA. Four controls required for completion.

Performance Standards

Executes appropriate Search/Detection/ID profiles.
Correctly uses aircraft systems for target coordinate and 9-line generation.
Provides accurate verbal description during talk-on attacks. When required, marks the target with a CEP less than 300 meters.
Executes FAC(A)/CAS attack profiles appropriate for threat/friendlyes/systems and environment.

Executes FAC(A) Type 1/3 control TTPs IAW JCAS using proper terminology.

Prerequisite. SFAC(A)-481.

Ordnance. RP rockets, 40 Chaff/20 Flare for ALE-39 equipped aircraft/60 Chaff/60 Flare for ALE-47 equipped aircraft. TPOD with working LASER desired.

Range Requirements. RSTD, JCAS, SST, EXP.

External Syllabus Support. One or two FW CAS elements with live or inert GP ordnance and a ground FAC.

FAC(A)-484

1.3 1 FA-18A/C and 1 Escort A (NS)

Goal. Introduce FAC(A) RW Type 1, 2, and 3 control procedures in a low (permissive) threat environment.

Requirement. Perform visual/sensor reconnaissance of three targets on a tactical range, generating target coordinates with aircraft systems. Plot targets on gridded imagery/chart and prepare target briefs. Control two Type 1, two Type 2 and one Type 3 attacks by attack helicopters. Use appropriate RW CAS briefing and control procedures. Perform authentication procedures. Deliver marking rounds/talk-on (rockets/guns/TOW) or provide laser designation (Hellfire). If conducted at night, use appropriate tactics for target illumination if necessary. For Type 1 (rockets/guns) controls emphasis should be on providing corrections, ensuring compliance with limit-of-advance and providing threat lookout for RW assets in the target area. For Type 1 (TOW) controls emphasis should be on providing a target sort and ensuring no friendlies in the SDZ. Two TOW/Hellfire controls are required for completion. One of the two controls must have the FAC(A) lasing for Hellfire employment. Simulated TOW and captive Hellfire are acceptable.

Performance Standards

Executes appropriate Search/Detection/ID profiles.
Correctly uses aircraft systems for target coordinate and 9-line generation.
Provides accurate verbal description during talk-on attacks.
If required, marks the target with a CEP less than 300 meters.
Provides LASER mark using proper J-LASER terminology.
Executes FAC(A)/CAS attack profiles appropriate for threat/friendlies/systems and environment.
Executes FAC(A) Type 1/2/3 control TTPs IAW JCAS using proper terminology.

Prerequisite. SFAC(A)-481.

Ordnance. TPOD with working LASER, 2 GBU-10/12/16 or 2 pods 2.75"/5.0" RP rockets, 40 Chaff/20 Flare for ALE-39 equipped aircraft/60 Chaff/60 Flare for ALE-47 equipped aircraft.

Range Requirements. RSTD, JCAS, SST, EXP.

External Syllabus Support. One or two RW CAS elements with live/captive Hellfire and a ground FAC.

FAC(A)-485

1.3

1 FA-18A/C and 1 Escort A (NS)

Goal. Introduce FAC(A) Type 1/2/3 control procedures in an urban environment.

Requirement. Perform visual/sensor reconnaissance of three separate targets in an urban environment, generating target coordinates with aircraft systems. Plot targets on Gridded Reference Graphic (GRG) and prepare target briefs. Control two Type 1 and two Type 2/3 attacks by aircraft. Use appropriate CAS briefing and control procedures. Deliver or coordinate marks as required. Demonstrate the ability to provide timely, accurate corrections for CAS aircraft, and the ability to provide GRG-based talk-ons. Integrate fires with ground FAC via datalink from TPOD to remote station, if so equipped. Four controls required for completion.

Performance Standards

Executes appropriate Search/Detection/ID profiles.
Correctly uses aircraft systems for target coordinate, 9-line and BHA generation.
Provides accurate verbal description during GRG talk-on attacks.
Executes FAC(A)/CAS attack profiles appropriate for threat/friendly locations/systems and environment.
Executes FAC(A) Type 1/2/3 control TTPs IAW JCAS using proper terminology.

Prerequisite. SFAC(A)-481.

Ordinance. TPOD with working LASER and ISR Datalink, 1 AGM-65E (captive or live), 1 GBU-10/12/16, 250 rnds of 20mm, 40 Chaff/20 Flare for ALE-39 equipped aircraft/60 Chaff/60 Flare for ALE-47 equipped aircraft.

Range Requirements. JCAS, SST, EXP, URBN WPNS.

External Syllabus Support. One or more FW or RW CAS elements, and a ground FAC. Ground FAC/JTAC should have capability to receive TPOD video via datalink.

FAC(A)-486

1.3

1 FA-18A/C and 1 Escort A (NS)

Goal. Introduce mortar/artillery airspot.

Requirement. Perform visual/sensor reconnaissance on three tactical targets, generating target coordinates with aircraft systems. Plot targets on gridded imagery/chart and prepare a call-for-fire brief. Emphasize accurate call-for-fire communications and adjustment procedures. One LASER adjust fire, one immediate suppression, one SEAD mission, and one high threat SEAD mission. Emphasis on high-threat airspot is FAC(A) positioning to provide redundant mark and accurate corrections for IDFS with simulated weather of overcast at 8,000 ft MSL. Both SEAD missions must include marking and suppression targets.

Performance Standards

Executes appropriate Search/Detection/ID profiles.

Correctly uses aircraft systems for target coordinate and 9-line generation.
Employs proper communications format with the firing unit.
Provides timely and accurate corrections to the firing unit.
Completes an immediate suppression CFF within 60 seconds of receiving the mission from the FAC/FO.

Prerequisite. SFAC(A)-481.

Ordinance. TPOD with working LASER, 40 Chaff/20 Flare for ALE-39 equipped aircraft/60 Chaff/60 Flare for ALE-47 equipped aircraft.

Range Requirements. JCAS, SST, EXP.

External Syllabus Support. Indirect Fire Support (IDFS) asset (mortars or artillery) and a ground FAC or FO. IDFS asset requires a minimum of 10 HE rds, 2 WP rds, and 8 Illum rds.

FAC(A)-487

1.3 R 1 FA-18A/C and 1 Escort A NS

Goal. Introduce FAC(A) Night Systems procedures in a low (permissive) threat environment.

Requirement. Perform visual/sensor reconnaissance of three separate targets on a tactical range, generating target coordinates with aircraft systems. Plot targets on gridded imagery/chart and prepare target briefs. Control two Type 1 and two Type 2 attacks by FW aircraft. Use appropriate CAS briefing and control procedures. Perform authentication procedures. Deliver or coordinate marking rounds or IR/LASER mark on target. At least one Type 1 control must use an IR pointer, if so equipped. At least one Type 1 control must be supported by air-delivered covert illumination (LUU-19). Demonstrate the ability to provide timely, accurate corrections for CAS aircraft. Provide BHA. Four controls required for completion. If a range that permits Type 2 control is not available, Type 2 control may be evaluated with simulated JDAM/LGB deliveries. If LUU-19s are not available, LUU-2s/Illum rockets may be substituted.

Performance Standards

Executes appropriate Search/Detection/ID profiles.
Correctly uses aircraft systems for target coordinate and 9-line generation.
Provides IR/LASER mark using proper terminology. Executes FAC(A)/CAS attack profiles appropriate for threat/friendly locations/systems and environment.
Executes FAC(A) Type 1/2 control TTPs IAW JCAS using proper terminology.

Prerequisite. SFAC(A)-481.

Ordinance. TPOD with working LASER, 2 GBU-10/12/16 or 2 pods 2.75"/5.0" RP rockets, 4 LUU-19/LUU-2 or 1 pod 2.75" Illum rockets, 40 Chaff/20 Flare for ALE-39 equipped aircraft/60 Chaff/60 Flare for ALE-47 equipped aircraft.

Range Requirements. JCAS, SST, EXP.

External Syllabus Support. One or two FW CAS elements and a ground FAC.

FAC(A)-488

1.3

R 1 FA-18A/C and 1 Escort A

Goal. Introduce FAC(A) two-element integration procedures in a day, medium (restrictive) threat environment.

Requirement. Perform visual/sensor reconnaissance of three separate targets on a tactical range, generating target coordinates with aircraft systems. Plot targets on gridded imagery/chart and prepare target briefs. Control four Type 1 attacks by FW aircraft utilizing medium threat tactics. A minimum of two CAS profiles must be pop-up attacks. Emphasis during these pop-up attacks is on FAC(A) positioning for redundant marking and Type 1 control. Deliver or coordinate marks on target. Demonstrate the ability to provide timely, accurate corrections for CAS aircraft. Provide BHA. Four controls required for completion.

Performance Standards

Executes appropriate Search/Detection/ID profiles.
Correctly uses aircraft systems for target coordinate and 9-line generation.
Ensures proper coordination and approval for IDF, rotary wing and fixed wing attacks.
Executes FAC(A)/CAS attack profiles appropriate for threat/friendly locations/systems and environment.
Executes FAC(A) Type 1/2/3 control TTPs IAW JCAS using proper terminology.

Prerequisite. FAC(A)-482-487 complete.

Ordinance. 2 GBU-10/12/16 or 2 pods 2.75"/5.0" RP rockets, 40 Chaff/20 Flare for ALE-39 equipped aircraft/60 Chaff/60 Flare for ALE-47 equipped aircraft. TPOD with working LASER desired.

Range Requirements. JCAS, EXP.

External Syllabus Support. One FW CAS element, One additional Fire support asset (RW CAS/UAV CAS/IDFS) and a ground FAC. If IDFS is to be used 10 HE rds, 4 WP rds for marking or suppression required.

FAC(A)-489

1.3

R 1 FA-18A/C and 1 Escort A NS

Goal. Introduce FAC(A) two-element integration procedures in a night, medium (restrictive) threat environment.

Requirement. Perform visual/sensor reconnaissance of three separate targets on a tactical range, generating target coordinates with aircraft systems. Plot targets on gridded imagery/chart and prepare target briefs. Control two Type 1 and two Type 2 attacks by FW aircraft utilizing medium threat tactics. Deliver or coordinate marks on target. Demonstrate the ability to provide timely, accurate corrections for CAS aircraft. Provide BHA. Four controls required for completion. If a range that permits Type 2 control is not

available, Type 2 control may be evaluated with simulated JDAM/LGB deliveries.

Performance Standards

Executes appropriate Search/Detection/ID profiles.
Correctly uses aircraft systems for target coordinate and 9-line generation.
Ensures proper coordination and approval for IDF, rotary wing and fixed wing attacks.
Executes FAC(A)/CAS attack profiles appropriate for threat/friendly locations/systems and environment.
Executes FAC(A) Type 1/2/3 control TTPs IAW JCAS using proper terminology.

Prerequisite. FAC(A)-488.

Ordnance. TPOD with working LASER, 2 GBU-10/12/16 or 2 pods 2.75"/5.0" RP rockets, 40 Chaff/20 Flare for ALE-39 equipped aircraft/60 Chaff/60 Flare for ALE-47 equipped aircraft.

Range Requirements. JCAS, EXP.

External Syllabus Support. One FW CAS element, One additional Fire support asset (RW CAS/UAV CAS/IDFS) and a ground FAC. If IDFS is to be used 10 HE rds, 4 WP rds for marking or suppression required.

FAC(A)-490

1.3 R 1 FA-18A/C and 1 Escort A (NS)

Goal. Practice FAC(A) multi-element and supporting arms integration.

Requirement. Perform visual/sensor reconnaissance, generating target coordinates with aircraft systems. Plot targets on gridded imagery/chart and prepare target briefs. Plan and execute at least one integrated attack utilizing 3 or more elements. For FW/RW/UAV integration, emphasis is on conducting a sectorized simultaneous or combined sequential attack. For CAS/IDFS integration, time, altitude or lateral de-confliction can be used. This evaluation sortie should be flown in a MAGTF level exercise if possible.

Performance Standards

Executes appropriate Search/Detection/ID profiles.
Correctly uses aircraft systems for target coordinate and 9-line generation.
Ensures proper coordination and approval for IDF and CAS attacks.
Executes FAC(A)/CAS attack profiles appropriate for threat/friendly locations/systems and environment.
Executes FAC(A) Type 1/2/3 control TTPs IAW JCAS using proper terminology.

Prerequisite. FAC(A)-489.

Ordnance. TPOD with working LASER, 2 GBU-10/12/16 or 2 pods 2.75"/5.0" RP rockets, 40 Chaff/20 Flare for ALE-39 equipped aircraft/60 Chaff/60 Flare for ALE-47 equipped aircraft.

Range Requirements. JCAS, EXP.

External Syllabus Support. Minimum of 3 Fire Support assets (FW CAS/RW CAS/UAV CAS/IDFS) and a ground FAC. IDFS asset requires 10 HE rds, 4 WP rds.

FAC(A)-491 1.3 1 FA-18A/C/D and 1 Escort A (NS)
REFRESHER FA-18D ONLY

Goal. Introduce FAC(A) adverse weather procedures in an elevated-threat (restrictive) environment.

Requirement. Perform visual/sensor reconnaissance of three separate targets on a tactical range, generating target coordinates with aircraft systems. Plot targets on gridded imagery/chart and prepare target briefs. Control two Type 1 pop-up attacks and two Type 2 standoff attacks by FW CAS aircraft. Deliver or coordinate marking/suppression rounds on target. For IDFS integration, emphasis is on altitude or lateral de-confliction of fires effects using standard SEAD templates. Demonstrate the ability to provide timely, accurate corrections for CAS aircraft. Provide BHA. Four controls required for completion. If a range that permits Type 2 control is not available, Type 2 control may be evaluated with simulated JDAM/LGB deliveries. Simulated weather is overcast at 8,000 ft. This flight may be flown at night once it has been successfully completed during the daytime.

Performance Standards

Executes appropriate Search/Detection/ID profiles.
If required, marks the target with a CEP less than 300 meters.
Ensures proper coordination and approval for IDF and fixed wing attacks.
Executes FAC(A)/CAS attack profiles appropriate for threat/friendlies/systems and environment.
Executes FAC(A) Type 1/2 control TTPs IAW JCAS using proper terminology.

Prerequisite. FAC(A) Qual, FAC(A)-390 (D) or -490 (A/C) complete.

Ordinance. 2 pods 2.75"/5.0" RP rockets or 4 Mk-82/83, 40 Chaff/20 Flare for ALE-39 equipped aircraft/60 Chaff/60 Flare for ALE-47 equipped aircraft. TPOD with working LASER desired.

Range Requirements. MOA, JCAS, EXP.

External Syllabus Support. One or two FW CAS elements, one IDFS asset and a ground FAC. IDFS asset requires 10 HE rds, 4 WP rds.

FAC(A)-492 1.3 1 FA-18A/C/D and 1 Escort A

Goal. Introduce UAV/UCAV Integration.

Requirement. Perform visual/sensor reconnaissance on three tactical targets, generating target coordinates with aircraft systems. Receive one laser spot/target handoff from a UAV/UCAV. Plot targets on gridded imagery/chart and prepare an attack brief. Control two Type 2 and two Type 3 attacks by UAV/UCAV aircraft. Use appropriate CAS briefing and control

procedures. Perform authentication procedures. Deliver or coordinate LASER mark on target and guide one LGW to impact. Provide BHA and coordinate with UAV/UCAV to provide BHA. Four controls required for completion. If a range that permits Type 2 control is not available, Type 2 control may be evaluated with simulated LGW deliveries.

Performance Standards

Executes appropriate Search/Detection/ID profiles.
Correctly uses aircraft systems for target coordinate and 9-line generation.
Provides LASER mark using proper J-LASER terminology.
Executes FAC(A)/CAS attack profiles appropriate for threat/friendly locations/systems and environment.
Executes FAC(A) Type 2/3 control TTPs IAW JCAS using proper terminology.

Prerequisite. SFAC(A)-381(FA-18D) or 490 complete(FA-18 A/C).

Ordnance. TPOD with working LASER, 40 Chaff/20 Flare for ALE-39 equipped aircraft/60 Chaff/60 Flare for ALE-47 equipped aircraft.

Range Requirements. MOA, JCAS, EXP.

External Syllabus Support. UAV/UCAV asset with captive LGWs and a ground FAC or FO.

FAC(A)-493

1.3

1 FA-18A/C/D and 1 Escort A

Goal. Introduce Naval Surface Fire Support airspot TTPs.

Requirement. Perform visual/sensor reconnaissance on three tactical targets, generating target coordinates with aircraft systems. Plot targets on gridded imagery/chart and prepare a call-for-fire brief. Emphasize accurate call-for-fire communications and adjustment procedures. One adjust fire (LASER if feasible), and two mark and SEAD missions.

Performance Standards

Executes appropriate Search/Detection/ID profiles.
Employs proper communications format with the firing unit.
Provides timely and accurate corrections to the firing unit.
Requires four rounds or less to achieve a bracket sufficient for a Fire For Effect (FFE).

Prerequisite. FAC(A)-490 for FA-18 A/C. Academic complete for FA-18D.

Ordnance. TPOD with working LASER, 40 Chaff/20 Flare for ALE-39 equipped aircraft/60 Chaff/60 Flare for ALE-47 equipped aircraft.

Range Requirements. MOA, JCAS, EXP.

External Syllabus Support. Naval Surface Fire Support asset and a ground FAC or FO or NGLO. NSFS asset requires a minimum of 10 HE rds, 2 WP rds, and 8 Illum rds.

<u>FAC(A)-494</u>	<u>1.3</u>	<u>1 FA-18A/C/D and 1 Escort A</u>
	<u>Goal.</u>	Introduce FAC(A) AC-130 Call For Fire procedures.
	<u>Requirement.</u>	Perform visual/sensor reconnaissance on three tactical targets, generating target coordinates with aircraft systems. Plot targets on gridded imagery/chart and prepare a call-for-fire brief. Emphasize accurate call-for-fire communications and adjustment procedures. Three missions required for completion.
	<u>Performance Standards</u>	Executes appropriate Search/Detection/ID profiles. Correctly uses aircraft systems for target coordinate and call-for-fire brief generation. Provides accurate verbal description during talk-on attacks. If required, marks the target with a CEP less than 300 meters. Employs proper communications format with the AC-130.
	<u>Prerequisite.</u>	FAC(A)-490 for FA-18 A/C. Academic complete for FA-18D.
	<u>Ordinance.</u>	TPOD with working LASER, 40 Chaff/20 Flare for ALE-39 equipped aircraft/60 Chaff/60 Flare for ALE-47 equipped aircraft.
	<u>Range Requirements.</u>	MOA, JCAS, EXP.
	<u>External Syllabus Support.</u>	One AC-130 and a ground FAC.
<u>FAC(A)-495</u>	<u>1.3</u>	<u>1 FA-18A/C/D A (NS)</u>
	<u>Goal.</u>	Introduce escort procedures for FAC(A) wingman.
	<u>Requirement.</u>	Perform wingman duties during a FAC(A) mission. Provide mutual support, threat lookout, and duties assigned by the FAC(A) aircraft. Emphasis on communications relay and backup marks.
	<u>Performance Standards</u>	Maintains mutual support and threat lookout throughout mission. Maintains situational awareness to rapidly assist FAC(A) with backup marks and alternate radio communications.
	<u>Prerequisite.</u>	200 level complete.
	<u>Ordinance.</u>	TPOD with working LASER, 1 AGM-65E (captive or live), 1 GBU-10/12/16 or 2 pods 2.75"/5.0"rockets, 40 Chaff/20 Flare for ALE-39 equipped aircraft/60 Chaff/60 Flare for ALE-47 equipped aircraft.
	<u>Range Requirements.</u>	MOA, JCAS, EXP.
	<u>External Syllabus Support.</u>	2+ CAS aircraft. Indirect fire and C3 agencies preferred.

9. Tactical Aerial Reconnaissance (TAR)

a. Purpose. Develop proficiency at multi-sensor imagery reconnaissance with the Advanced Tactical Airborne Reconnaissance System (ATARS).

b. General

(1) Emphasize integrated mission planning, search profiles, sensor employment, and information flow through the C3 system. Both pre-planned collection and targets of opportunity techniques will be executed.

(2) After completion of this phase, aircrew may be designated TAR qualified by their commanding officer.

(3) ATARS aircraft must be configured with two operable Digital Tape Recorders, ATARS sensors, and APG-73 RUG 2. TAR-282 also requires an AN/ARQ-56 Data Link Pod and coordination with a Marine Tactical Exploitation Group (TEG) or similarly equipped ground imagery exploitation system.

(4) Aircraft should also be configured with operable CVRS, ALQ-126B, ALR-67, chaff, flares, KY-58, and CATM-9 when possible.

c. Academic Training. Refer to MAWTS-1 Course Catalog.

d. Flight and Simulator Event Training. (3 Events, 3.9 hours).

TAR-496

1.3

1 FA-18D A

Goal. Introduce Electro-optical (EO) and Infrared (IR) imagery collection using the Advanced Tactical Airborne Reconnaissance System (ATARS). Emphasize mission planning, target acquisition, and employment of EO and IR sensors while executing a day AR mission.

Requirement. Conduct high and low altitude AR as a section to detect and collect EO/IR imagery of both pre-planned targets and targets of opportunity.

Performance Standards

Conduct AR of named areas of interest and detect targets. Collect preplanned imagery using all EO and IR sensors. A minimum of one vertical, one high oblique, and one low oblique EO image will be collected. Complementary IR imagery will be collected simultaneously when applicable. Collect imagery of targets of opportunity with all EO and IR sensors. Execute target attacks and collect post-strike imagery for BDA.

Prerequisite. 200 Level complete.

Ordinance. 6 Mk-76, 40 Chaff/20 Flare for ALE-39 equipped aircraft/60 Chaff/60 Flare for ALE-47 equipped aircraft.

Range Requirements. RSTD, TGT, EXP.

TAR-497

1.3

R 1 FA-18D A (NS)

Goal. Introduce Synthetic Aperture Radar (SAR) imagery collection while employing ATARS. Emphasize mission planning, target acquisition, and employment of both SAR and the Infrared Line Scanner (IRLS) in a night AR mission.

Requirement. Conduct night AR as a section to locate targets and collect both SAR and IR imagery of pre-planned targets and targets of opportunity.

Performance Standards

Conduct AR of named areas of interest and detect targets.

Collect pre-planned imagery using both SAR and IRLS.

A minimum of two SAR strip maps and two SAR spot maps are required.

Complementary IR imagery will be collected of the same targets.

Collect imagery of targets of opportunity using both SAR and IRLS.

Perform target attacks and collect post-strike imagery for BDA.

Prerequisite. TAR-496.

Ordinance. 6 Mk-76, 10 40 Chaff/20 Flare for ALE-39 equipped aircraft/60 Chaff/60 Flare for ALE-47 equipped aircraft.

Range Requirements. RSTD, TGT, EXP.

TAR-498

1.3

1 FA-18D A (NS)

Goal. Introduce employment of the AN/ARQ-56 ATARS Datalink Pod. Emphasize mission planning, sensor employment, and datalink of time-critical imagery while executing a medium threat AI mission.

Requirement. Execute a medium threat AI mission, collect pre-planned targets and targets of opportunity, and datalink time-critical imagery to the TEG.

Performance Standards

Collect preplanned imagery enroute using EO, IR, and SAR sensors.

Collect pre-strike and post-strike imagery of assigned DMPs.

Conduct imagery review inflight and datalink time-sensitive imagery to the TEG.

Prerequisite. TAR-497.

Ordinance. 6 Mk-76 or 2 LGTR, 40 Chaff/20 Flare for ALE-39 equipped aircraft/60 Chaff/60 Flare for ALE-47 equipped aircraft.

Range Requirements. RSTD, TGT, EXP, LSR.

External Syllabus Support. TEG or similarly equipped ground imagery exploitation system required.

140. 500 LEVEL INSTRUCTOR UNDER TRAINING (IUT) (FA-18A/C/D)

1. Instructor Under Training (IUT). IUT training shall be conducted in accordance with the MAWTS-1 Course Catalog.

2. Low Altitude Tactics Instructor (LATI)

a. Purpose. To certify an FA-18 Pilot as an instructor capable of safely conducting ground and airborne instruction of the FA-18 LAT flight syllabus.

b. General. Aircrew shall be LAT qualified and current prior to beginning this stage of training.

c. Ground/Academic Training. Refer to the MAWTS-1 Course Catalog.

d. Flight and Simulator Event Training. (4 Events, 4.9 hours).

SLATI-510 1.0 E WTT/OFT S
Requirement. Reference the MAWTS-1 Course Catalog for the LATI POI.

LATI-511 1.3 E 2 FA-18A/C/D A
Requirement. Reference the MAWTS-1 Course Catalog for the LATI POI.

LATI-512 1.3 E 2 FA-18A/C/D A
Requirement. Reference the MAWTS-1 Course Catalog for the LATI POI.

LATI-513 1.3 E 2 FA-18A/C/D A
Requirement. Reference the MAWTS-1 Course Catalog for the LATI POI.

3. Air Combat Tactics Instructor (ACTI)

a. Purpose. To certify FA-18 aircrew as instructors capable of safely conducting ground and airborne instruction of the FA-18 BFM and ACM flight syllabus.

b. General. Aircrew shall be ACM qualified. Pilots shall be a designated section lead and WSOs shall be of equivalent experience level.

c. Ground/Academic Training. Refer to the MAWTS-1 Course Catalog.

d. Flight and Simulator Event Training. (3 Events, 3.9 hours).

ACTI-520 1.3 E 2 FA-18A/C/D A
Requirement. Reference the MAWTS-1 Course Catalog for the ACTI POI.

ACTI-521 1.3 E 2 FA-18A/C/D A
Requirement. Reference the MAWTS-1 Course Catalog for the ACTI POI.

ACTI-522 1.3 E 2 FA-18A/C/D A

Requirement. Reference the MAWTS-1 Course Catalog for the ACTI POI.

4. Night System Instructor (NSI)

- a. Purpose. To certify an FA-18 aircrew as an instructor capable of safely conducting ground and airborne instruction of the FA-18 night systems flight syllabus.
- b. General. Reference the MAWTS-1 Course Catalog for the NSI POI.
- c. Ground/Academic Training. Refer to the MAWTS-1 Course Catalog.
- d. Flight and Simulator Event Training. (4 Events, 4.9 hours).

SNSI-530 1.0 E WTT/OFT S

Requirement. Reference the MAWTS-1 Course Catalog for the NSI
POI.

NSI-531 1.3 E 2 FA-18A/C/D A NS

Requirement. Reference the MAWTS-1 Course Catalog for the NSI
POI.

NSI-532 1.3 E 2 FA-18A/C/D vs 2 Adversaries A NS

Requirement. Reference the MAWTS-1 Course Catalog for the NSI
POI.

NSI-533 1.3 E 2 FA-18A/C/D A NS

Requirement. Reference the MAWTS-1 Course Catalog for the NSI
POI.

5. Forward Air Controller (Airborne) Instructor [FAC(A)I]

- a. Purpose. To certify FA-18 aircrew as a FAC(A)I capable of conducting ground and airborne instruction of the FAC(A) mission and capable of safely controlling CAS in close proximity to friendly troops. Emphasize demonstration of ability to coordinate simultaneous FW and RW CAS, artillery, or NSFS, while working for a TACP and operating with a MACCS.
- b. General. Pilots shall be a designated division lead and WSOs shall be of equivalent experience level.
- c. Ground/Academic Training. Refer to the MAWTS-1 Course Catalog.
- d. Flight and Simulator Event Training. (3 Events, 3.9 hours).

FAC(A) I-540 1.3 E 2 FA-18A/C/D A (NS)

Requirement. Reference the MAWTS-1 Course Catalog for the
FAC(A) I POI.

FAC(A)I-541 1.3 E 2 FA-18A/C/D A (NS)

Requirement. Reference the MAWTS-1 Course Catalog for the
FAC(A)I POI.

FAC(A)I-542 1.3 E 2 FA-18A/C/D A NS

Requirement. Reference the MAWTS-1 Course Catalog for the
FAC(A)I POI.

6. Tactical Air Coordinator (Airborne) Instructor [TAC(A)I]

a. Purpose. To certify an FA-18D aircrew as a TAC(A)I capable of
conducting ground and airborne instruction of the TAC(A) mission. Emphasize
ability to coordinate with the GCE, coordinate mission assignments with the
DASC and TACPs, and airspace management.

b. General. Pilots shall be a designated division lead and WSOs shall be
of equivalent experience level.

c. Ground/Academic Training. Refer to the MAWTS-1 Course Catalog.

d. Flight and Simulator Event Training. (1 Event, 1.3 hours).

TAC(A)I-550 1.3 E 2 FA-18D A (NS)

Requirement. Reference the MAWTS-1 Course Catalog for the
TAC(A)I POI.

7. Flight Lead Standardization Evaluator (FLSE)

a. Purpose. To designate Flight Lead Standardization Evaluators as
capable of evaluating and standardizing all prospective F/A-18 flight
leaders.

b. General

(1) Prerequisite. Prospective aircrew will, at a minimum, be a
designated Mission Commander nominated by the squadron commanding officer.

(2) Prospective FLSEs shall complete the POI before being designated
by the MAG commanding officer as a FLSE. All FLSE events will be monitored
by the Model Manager or Program Coordinator.

(3) Completion of the FLSE syllabus meets the requirements for
designation as a FLSE. At the discretion of the MAG commanding officer, a
letter designating the aircrew as a FLSE shall be placed in the NATOPS jacket
and APR. Additionally, the FLSE roster must be updated by the Model
Manager, through the Program Coordinators. FLSE re-designation criteria for
aircrew that do not require Core Skill Introduction Refresher training is at
the discretion of the MAG CO. For aircrew who require Core Skill
Introduction Refresher training, the minimum re-designation requirement for
FLSE positions is successful completion of the associated T&R FLSE POI.

(4) All FLSEs must complete annual refresher training by attending one
quarterly Model Manager/Program Coordinator standardization meeting or by
attending a standardization meeting with a current FLSE and by completing the
academic requirements established below.

SELF PACED READINGS	DATE COMP	INSTRUCTOR
USMC ADMIN SOP		
USMC FA-18 TACSOP		
Applicable Local SOP Addendum		
NAVMC DIR 3500.107(F/A-18 T&R)		
OPNAVINST 3710.1T		

- #### d. Requirements

(1) In-brief with the current USMC Model Manager or MAW Program Coordinators.

(2) Complete academic training established above.

(3) If practical, "shadow" a current FLSE during one event to observe established procedures for conducting a FLSE required event.

150. 600 LEVEL REQUIRED EVENTS (REQD)/QUALIFICATIONS (QUAL)/DESIGNATIONS
(DESG) (FA-18A/C/D)

1. Required Events (RQD)

- a. Purpose. To track training codes associated with required evaluations and flight leadership proficiency.

b. General

(1) E-coded sorties are evaluation sorties. CRP is not awarded for these 600-level sorties. However, CRP credit may be obtained by logging the appropriate training code(s) in the 200-400 level syllabus.

(2) Flight Leadership proficiency tracking codes (RQD-505-507) shall be logged in conjunction with the appropriate 200-400 level event training code every time an aircrew flies an event as a designated section lead, division lead, or mission commander.

- c. Ground/Academic Training. None.

- d. Flight and Simulator Event Training. (7 Events, 8.8 hours).

RQD-600 1.3 E 1+ FA-18A/C/D WTT/OFT A/S

Goal. Demonstrate proficiency flying an annual NATOPS check.

Requirement. Successfully conduct the check IAW applicable directives.

Performance Standards
IAW the FA-18 NATOPS.

Prerequisite. See current version of OPNAV 3710.

RQD-601 1.3 E 1+ FA-18A/C/D WTT/OFT A/S (NS)

Goal. Demonstrate proficiency flying an annual instrument check.

Requirement. Successfully conduct the evaluation IAW applicable directives.

Performance Standards
IAW NATOPS and OPNAV 3710.

RQD-603 1.3 1+ FA-18A/C/D A (NS)

Goal. Track proficiency in day or night strategic aerial refueling.

Requirement. Two day contacts or two night contacts required for completion.

External Syllabus Support. One KC-135 or KC-10 tanker.

SRQD-604 1.0 R,E WTT/OFT S

Goal. Introduce and demonstrate techniques and procedures associated with the Functional Check Flight (FCF).

Requirement. Simulator shall be used under the supervision of a designated FCF pilot. All portions of the FCF checklist shall be reviewed during the simulator period.

RQD-605 1.3 R 2 FA-18A/C/D A

Goal. Track section lead proficiency.

Requirement. To maintain proficiency as a section lead a pilot shall brief, lead, and debrief (or evaluate a prospective section lead) the designated event in accordance with the mission performance standards for that event.

Prerequisite. Designated section leader.

RQD-606 1.3 R 4 FA-18A/C/D A

Goal. Track division lead proficiency.

Requirement. To maintain proficiency as a division lead a pilot shall brief, lead, and debrief (or evaluate a prospective division lead) the designated event in accordance with the mission performance standards for that event.

Prerequisite. Designated division leader.

RQD-607 1.3 R 6+ FA-18A/C/D A

Goal. Track mission commander proficiency.

Requirement. To maintain proficiency as a mission commander aircrew shall brief, lead, and debrief (or evaluate a prospective mission commander) the designated event in

accordance with the mission performance standards for that event.

Prerequisite. Designated mission commander.

2. Qualification Events (QUAL)

a. Purpose. To track training codes associated with qualifications.

b. General. E-coded sorties are evaluation sorties. E-coded sorties in the 600-level phase may be logged in conjunction with any sortie that completes its stage. For example, RQD-610 may be flown in conjunction with LAT-282. CRP is not awarded for these 600-level sorties. However, CRP credit may be obtained by logging the appropriate training code(s) in the 200-400 level syllabus. Once the flight to attain the qualification is complete, a letter from the squadron commanding officer awarding the qualification shall be placed in the NATOPS jacket and APR.

c. Ground/Academic Training. Refer to the MAWTS-1 Course Catalog.

d. Flight and Simulator Event Training. (9 Events, 11.7 hours).

QUAL-610 1.3 R 2 FA-18A/C/D A

Goal. Tracking code for LAT qualification.

Requirement. Completion of LAT-282 meets the requirements for the PUI to be LAT qualified. At the discretion of the squadron commanding officer a letter assigning the PUI as LAT qualified shall be placed in the NATOPS jacket.

Prerequisite. LAT-280-282.

QUAL-611 1.3 R 1+ FA-18A/C/D A

Goal. Tracking code for day Carrier Qualification (CQ).

Requirement. Completion of ECQ-403 meets the requirements for the PUI to be day CQ. At the discretion of the squadron commanding officer a letter assigning the PUI as day CQ shall be placed in the NATOPS jacket.

Prerequisite. SECQ-400, ECQ-401,403.

QUAL-612 1.3 R 1+ FA-18A/C/D A N

Goal. Tracking code for night CQ.

Requirement. Completion of night CQ IAW current Naval Instructions meet the requirements for the PUI to be night CQ. At the discretion of the squadron commanding officer a letter assigning the PUI as night CQ shall be placed in the NATOPS jacket.

Prerequisite. SECQ-400, ECQ-401-404.